STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: STUO-08512-ST	6. SURFACE: State
1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME:
B. TYPE OF WELL: OIL ☐ GAS ☑ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☑	8. UNIT or CA AGREEMENT NAME: UNIT #891008900A
2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE L.P.	9. WELL NAME and NUMBER: NBU 1022-13O2S
3. ADDRESS OF OPERATOR: 1368 S 1200 E CITY VERNAL STATE UT ZIP 84078 / PHONE NUMBER: (435) 781-7024	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL (FOOTAGES) 637468X 4422844Y 39.946451 -109.340878 AT SURFACE: 1743'FSL, 1725'FWL AT PROPOSED PRODUCING ZONE: 1175'FSL, 2055'FEL SW SE 637928 X 4422681 Y 39.944915 -109.385531	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 13 10S 22E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 27.7 MILES SOUTH OF OURAY, UTAH	12. COUNTY: UINTAH / 13. STATE: UTAH

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET)	16. NUMBER OF ACRES IN LEASE:	17. NUMBER OF ACRES ASSIGNED TO THIS WELL:
1725'	600.00	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET)	**19. PROPOSED DEPTH:**	**20. BOND DESCRIPTION:**
REFER TO TOPO C	8,150	~~RLB0005237~~ 22013542
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.):	**22. APPROXIMATE DATE WORK WILL START:**	**23. ESTIMATED DURATION:**
5292'GL		

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
12 1/4"	9 5/8	32.3#	H-40	2,100	265 SX CLASS G	1.18 YIELD	15.6 PPG
7 7/8"	4 1/2	11.6#	I-80	8,150	1310 SX 50/50 POZ	1.31 YIELD	14.3 PPG

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
- ☑ COMPLETE DRILLING PLAN
- ☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE SENIOR LAND ADMIN SPECIALIST

SIGNATURE Sheila Upchego DATE 7/31/2007

(This space for State use only)

API NUMBER ASSIGNED: 43-047-39479

Approved by the
Utah Division of
Oil, Gas and Mining

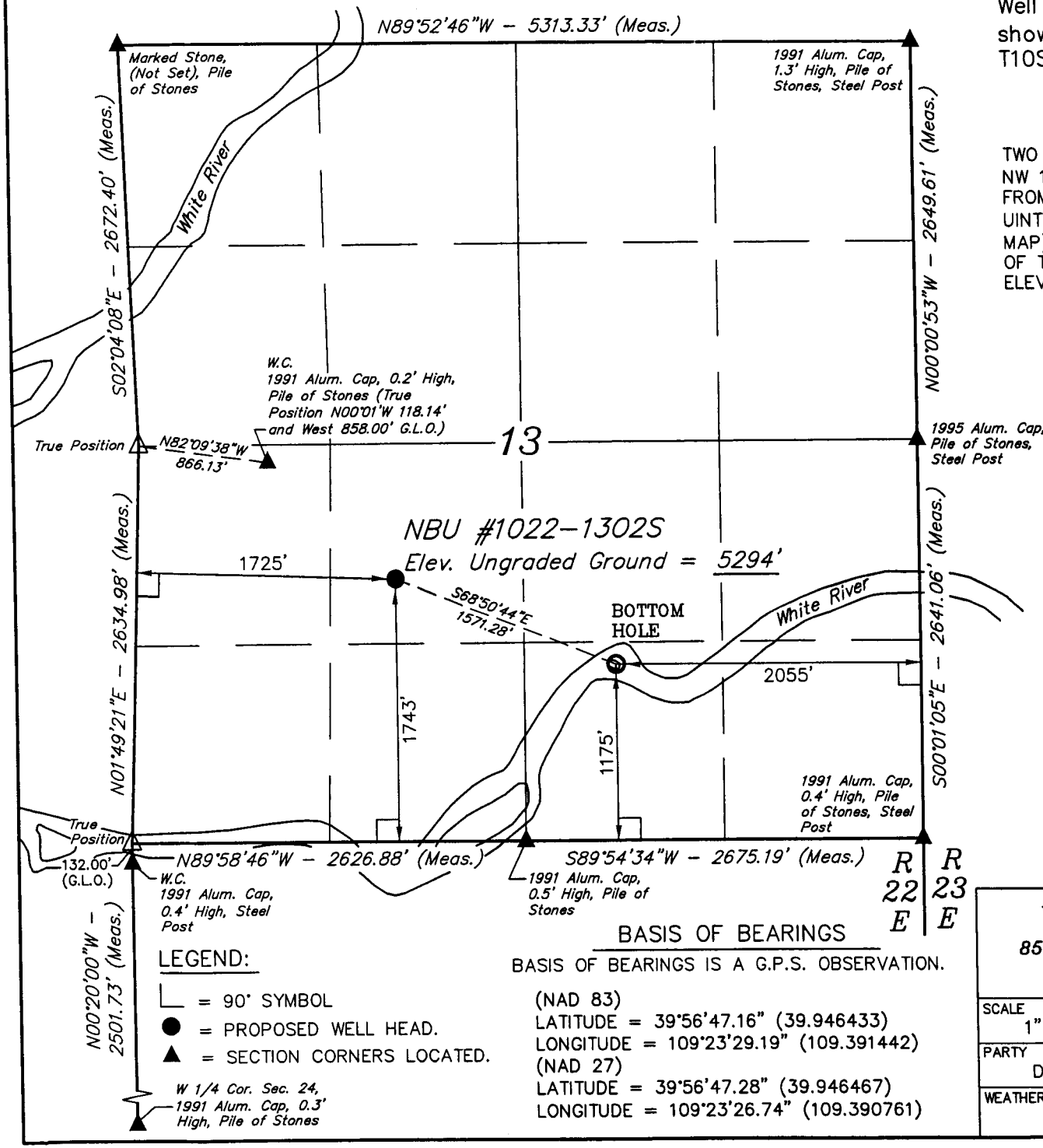
APPROVAL:

Date: 09-04-07
(See Instructions on Reverse Side)
By:

RECEIVED
AUG 06 2007
DIV. OF OIL, GAS & MINING

(11/2001)

T10S, R22E, S.L.B.&M.



LEGEND:

- └ = 90° SYMBOL
- ● = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

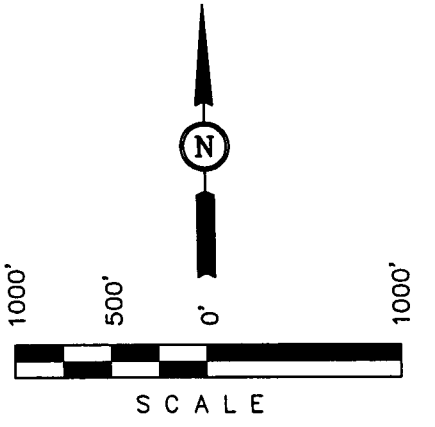
(NAD 83)
LATITUDE = 39°56'47.16" (39.946433)
LONGITUDE = 109°23'29.19" (109.391442)
(NAD 27)
LATITUDE = 39°56'47.28" (39.946467)
LONGITUDE = 109°23'26.74" (109.390761)

Kerr-McGee Oil & Gas Onshore LP

Well location, NBU #1022-1302S, located as shown in the NE 1/4 SW 1/4 of Section 13, T10S, R22E, S.L.B.&M. Uintah County, Utah.

BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
ROBERT L. KAY
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	5-17-07	6-13-07
PARTY: D.K. L.K. K.G.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: Kerr-McGee Oil & Gas Onshore LP	

NBU 1022-13O2S
NE/SW SEC. 13, T10S, R22E
UINTAH COUNTY, UTAH
UTSTUO-08512-ST

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. **Estimated Tops of Important Geologic Markers:**

Formation	Depth
Uinta	0- Surface
Green River	937'
Top of Birds Nest Water	1250'
Mahogany	1615'
Wasatch	3929'
Mesaverde	6205'
MVU2	7039'
MVL1	7602'
TD	8150'

2. **Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

Substance	Formation	Depth
	Green River	937'
Water	Top of Birds Nest Water	1250'
	Mahogany	1615'
Gas	Wasatch	3929'
Gas	Mesaverde	6205'
Gas	MVU2	7039'
Gas	MVL1	7602'
Water	N/A	
Other Minerals	N/A	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program.

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program.

The operator will use fresh water mud with 0-8% Bio Diesel.

6. **Evaluation Program:**

Please refer to the attached Drilling Program.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 8150' TD, approximately equals 5053 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3260 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

Drilling is planned to commence immediately upon approval of this application.

9. **Variances:**

Please refer to the attached Drilling Program.

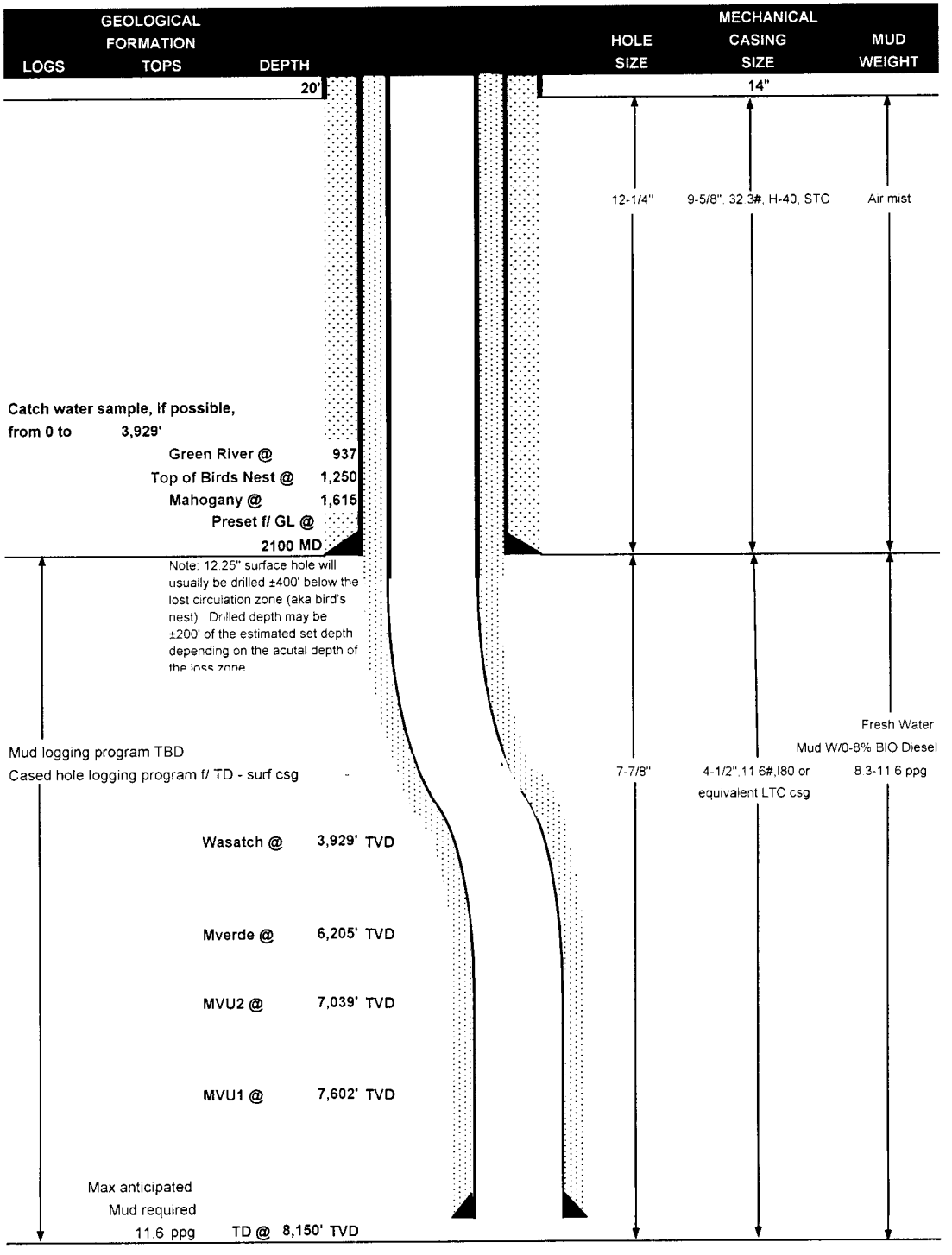
10. **Other Information:**

Please refer to the attached Drilling Program.

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	August 1, 2007
WELL NAME	**NBU 1022-13O2S**	TD	8,150' TVD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah	ELEVATION	5,293' GL	KB 5,308'
SURFACE LOCATION	NE/SW SEC. 13, T10S, R22E 1175'FSL, 1725'FWL		
	Latitude: 39.946433 Longitude: 109.391442		
BTM HOLE LOCATION	NW/SW/SE SEC. 13, T10S, R22E 1175'FSL, 2055'FEL		
OBJECTIVE ZONE(S)	Wasatch/Mesaverde		
ADDITIONAL INFO	Regulatory Agencies: UDOGM (MINERALS AND SURFACE), BLM, Tri-County Health Dept.		



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								2270	1370	254000
SURFACE	9-5/8"	0	to	2100	32.30	H-40	STC	0.73*******	1.39	4.28
								7780	6350	201000
PRODUCTION	4-1/2"	0	to	8150	11.60	I-80	LTC	2.49	1.29	2.44

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 0.0 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 3123 psi

********* **Burst SF is low but csg is much stronger than formation at 2000'. EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft**

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
Option 1	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized					
Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOW	360	35%	12.60	1.81
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	5,700'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	620	60%	11.00	3.38
	TAIL	2,450'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	690	60%	14.30	1.31

*Substitute caliper hole volume plus 15% excess if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

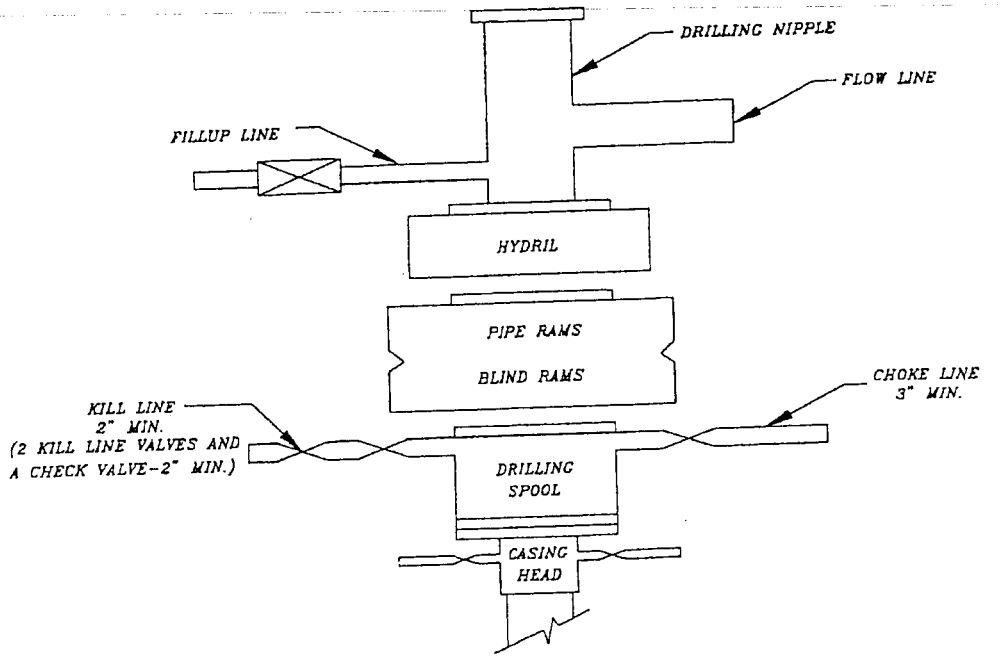
DRILLING ENGINEER: _____ **DATE:** _____

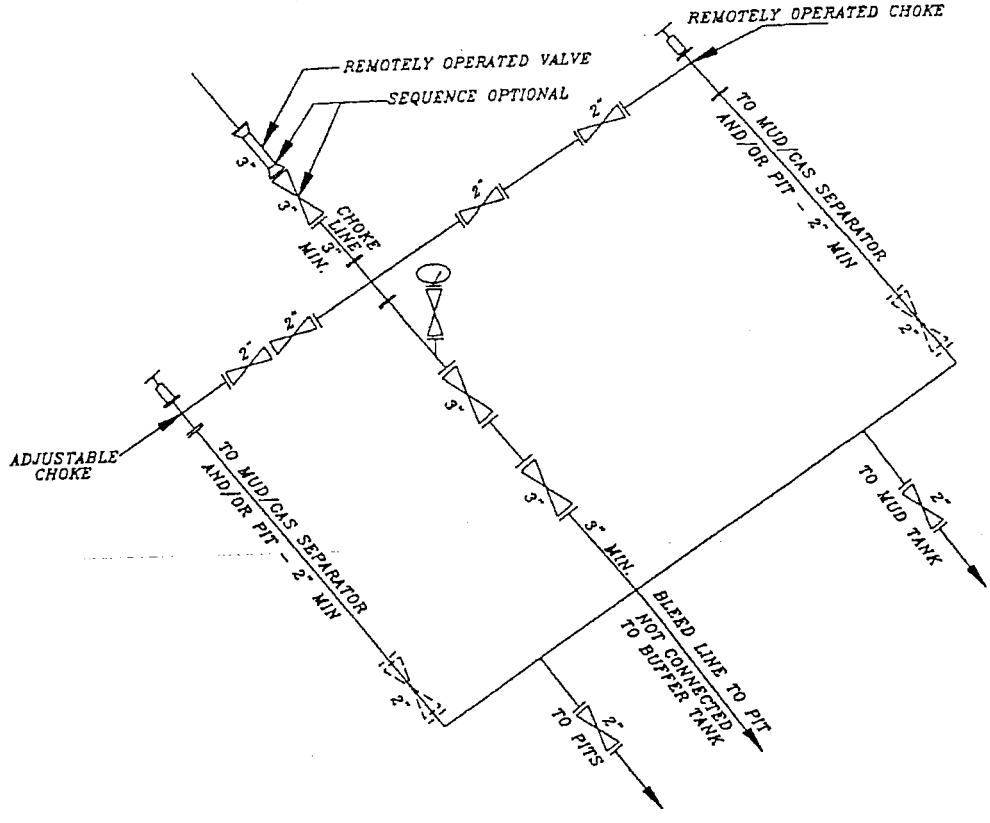
Brad Laney

DRILLING SUPERINTENDENT: _____ **DATE:** _____

Randy Bayne

5M BOP STACK and CHOKE MANIFOLD SYSTEM





NBU 1022-13O2S
NE/SW SEC. 13, T10S, R22E
Uintah County, UT
UTSTUO-08512-ST

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. **Existing Roads:**

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. **Planned Access Roads:**

The operator will utilize an existing access road. Refer to Topo Map B for the location of the existing access road.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

3. **Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

4. **Location of Existing & Proposed Facilities:**

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain

fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

A 30' rights of way will be required for approximately 12,184' +/- of 6" steel pipeline is proposed. The pipeline shall run from the location into Section 18, T10S, R23E (Lease #UTU-38421) and travel north into Sec. 7, T10S, R23E (Lease #UTU-49226) to tie-in to and existing pipeline. Refer to the attached Topo Map D for pipeline placement.

A 30' rights of way will be required for approximately 12,184' +/- of 10" steel pipeline is proposed. The pipeline shall run from the location into Section 18, T10S, R23E (Lease #UTU-38421) and travel north into Sec. 7, T10S, R23E (Lease #UTU-49226) to tie-in to and existing pipeline. Refer to the attached Topo Map D for pipeline placement.

5. **Location and Type of Water Supply:**

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. **Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

7. **Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

Due to difficult topography and proximity to the White River, the reserve pit will be constructed utilizing a double liner and felt. The liner will be approximately 60 mil in thickness versus our standard 20 mil and the reserve pit will also have a leak detection system installed between the liners.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled By truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E.

8. **Ancillary Facilities:**

None are anticipated.

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be re-surveyed and a Form 9 shall be submitted.

10. Plans for Reclamation of the Surface:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

11. Surface Ownership:

SITLA
675 East 500 South, Suite 500
Salt Lake City, UT 84102

12. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey will be submitted when report becomes available.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

13. Lessee's or Operators's Representative & Certification:

Sheila Upchego
Senior Land Admin Specialist
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East.
Vernal, UT 84078
(435) 781-7024

Randy Bayne
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435)781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Sheila Upchego

7/31/2007
Date

Weatherford

Drilling Services

Proposal

Anadarko KerrMcGee

ANADARKO - KERR McGEE

NBU #1022-1302S

UINTAH COUNTY, UTAH

WELL FILE: PLAN 2

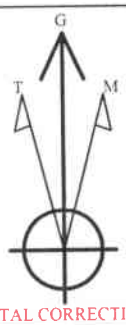
DATE: JULY 12, 2007

Weatherford International, Ltd.
15710 John F. Kennedy Blvd
Houston, Texas 77032 USA
+1.281.260.1300 Main
+1.281.260.4730 Fax
www.weatherford.com

KERR MCGEE OIL & GAS
NBU #1022-1302S
UINTAH COUNTY, UTAH

Anadarko KerrMcGee

Weatherford



Azimuths to Grid North
True North: -1.03°
Magnetic North: 10.52°

Magnetic Field
Strength: 52755nT
Dip Angle: 65.97°
Date: 6/29/2007
Model: bggm2006

TOTAL CORRECTION TO GRID NORTH: 10.52°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	109.11	0.00	0.00	0.00	0.00	0.00	0.00	
2	2160.00	0.00	109.11	2160.00	0.00	0.00	0.00	0.00	0.00	
3	3360.00	30.00	109.11	3305.92	-100.53	290.12	2.50	109.11	307.05	
4	4955.51	30.00	109.11	4687.67	-361.73	1043.90	0.00	0.00	1104.80	
5	6955.51	0.00	109.11	6597.52	-529.29	1527.44	1.50	180.00	1616.55	
6	8507.98	0.00	109.11	8150.00	-529.29	1527.44	0.00	0.00	1616.55	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
13O2S	0.00	0.00	14510596.50	2091378.20	39°56'47.075N	109°23'27.791W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	8150.00	-529.29	1527.44	14510067.21	2092905.64	Circle (Radius: 100)

FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	937.00	937.00	GREEN RIVER
2	3979.00	4137.21	WASATCH
3	6205.00	6562.29	MESAVERDE

FIELD DETAILS

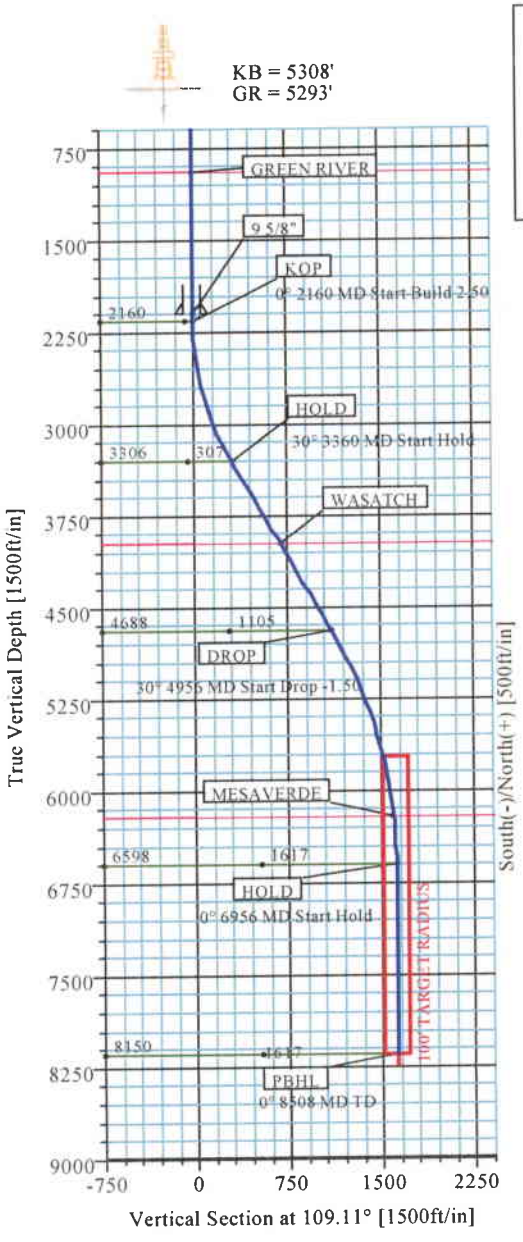
UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

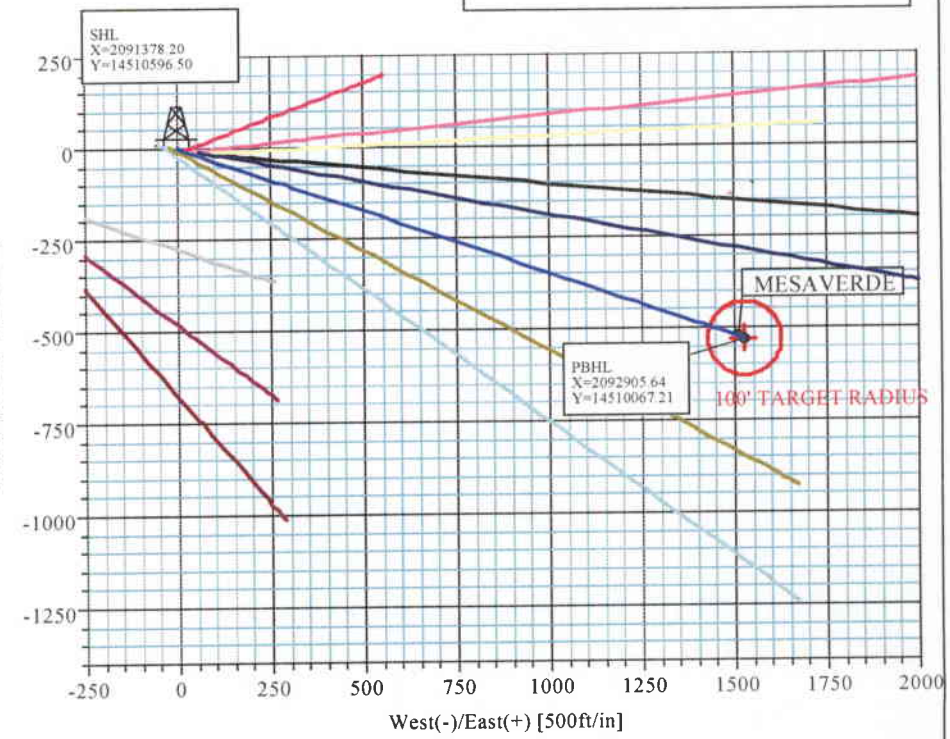
Geodetic System: Universal Transverse Mercator (USfeet)
Ellipsoid: NAD27 (Clarke 1866)
Zone: UTM Zone 12, North 114W to 108W
Magnetic Model: bggm2006

System Datum: Mean Sea Level
Local North: Grid North

CASING DETAILS

No.	TVD	MD	Name	Size
1	2100.00	2100.00	9 5/8"	9.62





Plan: Plan #2 (13O2S/1)

Created By: R. JOYNER Date: 7/12/2007

Weatherford Drilling Services
DIRECTIONAL PLAN REPORT

Weatherford

Company:	Anadarko-Kerr-McGee	**Date:** 7/13/2007	**Time:** 08:52:49	**Page:**	1
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	**Co-ordinate(NE) Reference:**	Site: NBU 1022-13O2S, Grid North		
Site:	NBU 1022-13O2S	**Vertical (TVD) Reference:**	SITE 5308.0		
Well:	13O2S	**Section (VS) Reference:**	Well (0.00N,0.00E,109.11Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Plan:	Plan #2	**Date Composed:**	7/11/2007
		Version:	1
Principal:	Yes	**Tied-to:**	From Surface

Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)		
Map System:	Universal Transverse Mercator (USfeet)	**Map Zone:**	UTM Zone 12, North 114W to 108W
Geo Datum:	NAD27 (Clarke 1866)	**Coordinate System:**	Site Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	bggm2006

Site:	NBU 1022-13O2S				
Site Position:		**Northing:**	14510596.50 ft	**Latitude:**	39 56 47.075 N
From:	Map	**Easting:**	2091378.20 ft	**Longitude:**	109 23 27.791 W
Position Uncertainty:	0.00 ft			**North Reference:**	Grid
Ground Level:	5293.00 ft			**Grid Convergence:**	1.03 deg

Well:	13O2S				**Slot Name:**	
Well Position:	**+N/-S**	0.00 ft	**Northing:**	14510596.50 ft	**Latitude:**	39 56 47.075 N
	+E/-W	0.00 ft	**Easting :**	2091378.20 ft	**Longitude:**	109 23 27.791 W
Position Uncertainty:		0.00 ft				

Wellpath:	1		**Drilled From:**	Surface
			Tie-on Depth:	0.00 ft
Current Datum:	SITE	**Height** 5308.00 ft	**Above System Datum:**	Mean Sea Level
Magnetic Data:	6/29/2007		**Declination:**	11.55 deg
Field Strength:	52755 nT		**Mag Dip Angle:**	65.97 deg

Vertical Section:	**Depth From (TVD)** ft	**+N/-S** ft	**+E/-W** ft	**Direction** deg
	0.00	0.00	0.00	109.11

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	109.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2160.00	0.00	109.11	2160.00	0.00	0.00	0.00	0.00	0.00	0.00	
3360.00	30.00	109.11	3305.92	-100.53	290.12	2.50	2.50	0.00	109.11	
4955.51	30.00	109.11	4687.67	-361.73	1043.90	0.00	0.00	0.00	0.00	
6955.51	0.00	109.11	6597.52	-529.29	1527.44	1.50	-1.50	0.00	180.00	
8507.98	0.00	109.11	8150.00	-529.29	1527.44	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
2100.00	0.00	109.11	2100.00	0.00	0.00	0.00	0.00	14510596.50	2091378.20	9 5/8"
2160.00	0.00	109.11	2160.00	0.00	0.00	0.00	0.00	14510596.50	2091378.20	KOP
2200.00	1.00	109.11	2200.00	-0.11	0.33	0.35	2.50	14510596.39	2091378.53	
2300.00	3.50	109.11	2299.91	-1.40	4.04	4.27	2.50	14510595.10	2091382.24	
2400.00	6.00	109.11	2399.56	-4.11	11.86	12.55	2.50	14510592.39	2091390.06	
2500.00	8.50	109.11	2498.75	-8.24	23.79	25.17	2.50	14510588.26	2091401.99	
2600.00	11.00	109.11	2597.30	-13.79	39.79	42.11	2.50	14510582.71	2091417.99	
2700.00	13.50	109.11	2695.02	-20.73	59.83	63.32	2.50	14510575.77	2091438.03	
2800.00	16.00	109.11	2791.71	-29.07	83.89	88.78	2.50	14510567.43	2091462.09	
2900.00	18.50	109.11	2887.21	-38.78	111.91	118.43	2.50	14510557.72	2091490.11	
3000.00	21.00	109.11	2981.32	-49.84	143.83	152.22	2.50	14510546.66	2091522.03	
3100.00	23.50	109.11	3073.87	-62.24	179.61	190.08	2.50	14510534.26	2091557.81	
3200.00	26.00	109.11	3164.67	-75.94	219.16	231.95	2.50	14510520.56	2091597.36	
3300.00	28.50	109.11	3253.57	-90.93	262.42	277.73	2.50	14510505.57	2091640.62	
3360.00	30.00	109.11	3305.92	-100.53	290.12	307.05	2.50	14510495.97	2091668.32	HOLD

Weatherford Drilling Services
DIRECTIONAL PLAN REPORT

Weatherford

Company:	Anadarko-Kerr-McGee	**Date:** 7/13/2007	**Time:** 08:52:49	**Page:**	2
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	**Co-ordinate(NE) Reference:**	Site: NBU 1022-13O2S, Grid North		
Site:	NBU 1022-13O2S	**Vertical (TVD) Reference:**	SITE 5308.0		
Well:	13O2S	**Section (VS) Reference:**	Well (0.00N,0.00E,109.11Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
3400.00	30.00	109.11	3340.56	-107.08	309.02	327.05	0.00	14510489.42	2091687.22	
3500.00	30.00	109.11	3427.16	-123.45	356.26	377.05	0.00	14510473.05	2091734.46	
3600.00	30.00	109.11	3513.76	-139.82	403.51	427.05	0.00	14510456.68	2091781.71	
3700.00	30.00	109.11	3600.36	-156.19	450.75	477.05	0.00	14510440.31	2091828.95	
3800.00	30.00	109.11	3686.97	-172.57	498.00	527.05	0.00	14510423.93	2091876.20	
3900.00	30.00	109.11	3773.57	-188.94	545.24	577.05	0.00	14510407.56	2091923.44	
4000.00	30.00	109.11	3860.17	-205.31	592.48	627.05	0.00	14510391.19	2091970.68	
4100.00	30.00	109.11	3946.77	-221.68	639.73	677.05	0.00	14510374.82	2092017.93	
4137.21	30.00	109.11	3979.00	-227.77	657.31	695.65	0.00	14510368.73	2092035.51	WASATCH
4200.00	30.00	109.11	4033.38	-238.05	686.97	727.05	0.00	14510358.45	2092065.17	
4300.00	30.00	109.11	4119.98	-254.42	734.22	777.05	0.00	14510342.08	2092112.42	
4400.00	30.00	109.11	4206.58	-270.79	781.46	827.05	0.00	14510325.71	2092159.66	
4500.00	30.00	109.11	4293.18	-287.16	828.70	877.05	0.00	14510309.34	2092206.90	
4600.00	30.00	109.11	4379.79	-303.53	875.95	927.05	0.00	14510292.97	2092254.15	
4700.00	30.00	109.11	4466.39	-319.91	923.19	977.05	0.00	14510276.59	2092301.39	
4800.00	30.00	109.11	4552.99	-336.28	970.44	1027.05	0.00	14510260.22	2092348.64	
4900.00	30.00	109.11	4639.59	-352.65	1017.68	1077.05	0.00	14510243.85	2092395.88	
4955.51	30.00	109.11	4687.67	-361.73	1043.90	1104.80	0.00	14510234.77	2092422.10	DROP
5000.00	29.33	109.11	4726.33	-368.94	1064.71	1126.82	1.50	14510227.56	2092442.91	
5100.00	27.83	109.11	4814.14	-384.61	1109.91	1174.66	1.50	14510211.89	2092488.11	
5200.00	26.33	109.11	4903.17	-399.51	1152.93	1220.19	1.50	14510196.99	2092531.13	
5300.00	24.83	109.11	4993.36	-413.65	1193.73	1263.37	1.50	14510182.85	2092571.93	
5400.00	23.33	109.11	5084.66	-427.01	1232.29	1304.17	1.50	14510169.49	2092610.49	
5500.00	21.83	109.11	5176.99	-439.59	1268.57	1342.57	1.50	14510156.91	2092646.77	
5600.00	20.33	109.11	5270.29	-451.36	1302.56	1378.54	1.50	14510145.14	2092680.76	
5700.00	18.83	109.11	5364.50	-462.34	1334.23	1412.06	1.50	14510134.16	2092712.43	
5800.00	17.33	109.11	5459.56	-472.50	1363.55	1443.10	1.50	14510124.00	2092741.75	
5900.00	15.83	109.11	5555.40	-481.84	1390.52	1471.64	1.50	14510114.66	2092768.72	
6000.00	14.33	109.11	5651.95	-490.36	1415.10	1497.66	1.50	14510106.14	2092793.30	
6079.56	13.14	109.11	5729.23	-496.55	1432.95	1516.55	1.50	14510099.95	2092811.15	INT. TGT CYLINDER
6100.00	12.83	109.11	5749.15	-498.05	1437.29	1521.14	1.50	14510098.45	2092815.49	
6200.00	11.33	109.11	5846.93	-504.91	1457.07	1542.07	1.50	14510091.59	2092835.27	
6300.00	9.83	109.11	5945.23	-510.92	1474.42	1560.44	1.50	14510085.58	2092852.62	
6400.00	8.33	109.11	6043.97	-516.09	1489.34	1576.22	1.50	14510080.41	2092867.54	
6500.00	6.83	109.11	6143.10	-520.41	1501.81	1589.42	1.50	14510076.09	2092880.01	
6562.29	5.90	109.11	6205.00	-522.67	1508.33	1596.32	1.50	14510073.83	2092886.53	MESAVERDE
6600.00	5.33	109.11	6242.53	-523.88	1511.82	1600.01	1.50	14510072.62	2092890.02	
6700.00	3.83	109.11	6342.21	-526.49	1519.37	1608.00	1.50	14510070.01	2092897.57	
6800.00	2.33	109.11	6442.06	-528.25	1524.45	1613.38	1.50	14510068.25	2092902.65	
6900.00	0.83	109.11	6542.02	-529.16	1527.06	1616.14	1.50	14510067.34	2092905.26	
6955.51	0.00	109.11	6597.52	-529.29	1527.44	1616.55	1.50	14510067.21	2092905.64	HOLD
7000.00	0.00	109.11	6642.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
7100.00	0.00	109.11	6742.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
7200.00	0.00	109.11	6842.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
7300.00	0.00	109.11	6942.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
7400.00	0.00	109.11	7042.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
7500.00	0.00	109.11	7142.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
7600.00	0.00	109.11	7242.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
7700.00	0.00	109.11	7342.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
7800.00	0.00	109.11	7442.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
7900.00	0.00	109.11	7542.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
8000.00	0.00	109.11	7642.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
8100.00	0.00	109.11	7742.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	

Weatherford Drilling Services
DIRECTIONAL PLAN REPORT

Weatherford

Company:	Anadarko-Kerr-McGee	**Date:** 7/13/2007	**Time:** 08:52:49	**Page:**	3
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	**Co-ordinate(NE) Reference:**	Site: NBU 1022-13O2S, Grid North		
Site:	NBU 1022-13O2S	**Vertical (TVD) Reference:**	SITE 5308.0		
Well:	13O2S	**Section (VS) Reference:**	Well (0.00N,0.00E,109.11Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
8200.00	0.00	109.11	7842.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
8300.00	0.00	109.11	7942.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
8400.00	0.00	109.11	8042.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
8500.00	0.00	109.11	8142.02	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	
8507.97	0.00	109.11	8149.99	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	PBHL
8507.98	0.00	109.11	8150.00	-529.29	1527.44	1616.55	0.00	14510067.21	2092905.64	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ----> Deg Min Sec	<---- Longitude ----> Deg Min Sec
PBHL -Circle (Radius: 100) -Plan hit target			8150.00	-529.29	1527.44	14510067.21	2092905.64	39 56 41.572 N	109 23 8.303 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
2100.00	2100.00	9.62	12.25	9 5/8"

Annotation

MD ft	TVD ft	
2160.00	2160.00	KOP
3360.00	3305.92	HOLD
4955.51	4687.67	DROP
6079.56	5729.23	INT. TGT CYLINDER
6955.51	6597.53	HOLD
8507.97	8149.99	PBHL

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
937.00	937.00	GREEN RIVER		0.00	0.00
4137.21	3979.00	WASATCH		0.00	0.00
6562.29	6205.00	MESAVERDE		0.00	0.00

Weatherford Drilling Services
Anticollision Report

Weatherford

Company:	Anadarko-Kerr-McGee	**Date:** 7/13/2007	**Time:** 08:54:01	**Page:**	1
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)				
Reference Site:	NBU 1022-13O2S	**Co-ordinate(NE) Reference:**	Site: NBU 1022-13O2S, Grid North		
Reference Well:	13O2S	**Vertical (TVD) Reference:**	SITE 5308.0		
Reference Wellpath:	1			**Db:**	Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria		**Reference:**	Plan: Plan #2
Interpolation Method:	MD **Interval:** 100.00 ft	**Error Model:**	ISCWSA Ellipse
Depth Range:	0.00 **to** 8507.98 ft	**Scan Method:**	Closest Approach 3D
Maximum Radius:	10000.00 ft	**Error Surface:**	Ellipse

Plan:	Plan #2	**Date Composed:**	7/11/2007
		Version:	1
Principal:	Yes	**Tied-to:**	From Surface

Summary

<---------- Offset Wellpath ----------> Site	Well	Wellpath	Reference MD ft	Offset MD ft	Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
NBU 1022-13O1CS	Well #13O1CS	1 V0 Plan: Plan #1 V1	2500.00	2502.81	21.55	11.38	2.12	

Site: NBU 1022-13O1CS
Well: Well #13O1CS
Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error: 0.00 ft

Reference MD ft	Reference TVD ft	Offset MD ft	Offset TVD ft	Semi-Major Axis Ref ft	Semi-Major Axis Offset ft	TFO-HS deg	Offset Location North ft	Offset Location East ft	Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	279.93	3.50	-20.00	20.30			No Data
100.00	100.00	100.00	100.00	0.09	0.09	279.93	3.50	-20.00	20.30	20.13	114.05	
200.00	200.00	200.00	200.00	0.30	0.30	279.93	3.50	-20.00	20.30	19.71	34.02	
300.00	300.00	300.00	300.00	0.51	0.51	279.93	3.50	-20.00	20.30	19.29	19.99	
400.00	400.00	400.00	400.00	0.72	0.72	279.93	3.50	-20.00	20.30	18.87	14.15	
500.00	500.00	500.00	500.00	0.93	0.93	279.93	3.50	-20.00	20.30	18.45	10.95	
600.00	600.00	600.00	600.00	1.14	1.14	279.93	3.50	-20.00	20.30	18.03	8.93	
700.00	700.00	700.00	700.00	1.35	1.35	279.93	3.50	-20.00	20.30	17.61	7.54	
800.00	800.00	800.00	800.00	1.56	1.56	279.93	3.50	-20.00	20.30	17.19	6.53	
900.00	900.00	900.00	900.00	1.76	1.76	279.93	3.50	-20.00	20.30	16.77	5.75	
1000.00	1000.00	1000.00	1000.00	1.97	1.97	279.93	3.50	-20.00	20.30	16.36	5.14	
1100.00	1100.00	1100.00	1100.00	2.18	2.18	279.93	3.50	-20.00	20.30	15.94	4.65	
1200.00	1200.00	1200.00	1200.00	2.39	2.39	279.93	3.50	-20.00	20.30	15.52	4.24	
1300.00	1300.00	1300.00	1300.00	2.60	2.60	279.93	3.50	-20.00	20.30	15.10	3.90	
1400.00	1400.00	1400.00	1400.00	2.81	2.81	279.93	3.50	-20.00	20.30	14.68	3.61	
1500.00	1500.00	1500.00	1500.00	3.02	3.02	279.93	3.50	-20.00	20.30	14.26	3.36	
1600.00	1600.00	1600.00	1600.00	3.23	3.23	279.93	3.50	-20.00	20.30	13.84	3.14	
1700.00	1700.00	1700.00	1700.00	3.44	3.44	279.93	3.50	-20.00	20.30	13.42	2.95	
1800.00	1800.00	1800.00	1800.00	3.65	3.65	279.93	3.50	-20.00	20.30	13.00	2.78	
1900.00	1900.00	1900.00	1900.00	3.86	3.86	279.93	3.50	-20.00	20.30	12.59	2.63	
2000.00	2000.00	2000.00	2000.00	4.07	4.07	279.93	3.50	-20.00	20.30	12.17	2.50	
2100.00	2100.00	2100.00	2100.00	4.28	4.28	279.93	3.50	-20.00	20.30	11.75	2.37	
2200.00	2200.00	2200.34	2200.34	4.49	4.49	170.65	3.33	-19.69	20.32	11.34	2.26	
2300.00	2299.91	2301.18	2301.09	4.70	4.70	168.80	1.41	-16.19	20.46	11.07	2.18	
2400.00	2399.56	2402.01	2401.56	4.91	4.92	165.01	-2.65	-8.81	20.82	11.04	2.13	
2500.00	2498.75	2502.81	2501.53	5.14	5.14	159.51	-8.82	2.43	21.55	11.38	2.12	
2600.00	2597.30	2603.58	2600.82	5.38	5.39	152.76	-17.11	17.50	22.80	12.22	2.15	
2700.00	2695.02	2704.31	2699.21	5.66	5.67	145.40	-27.48	36.38	24.76	13.71	2.24	
2800.00	2791.71	2804.99	2796.50	5.98	6.00	138.09	-39.92	59.02	27.56	15.94	2.37	
2900.00	2887.21	2905.60	2892.52	6.36	6.38	131.33	-54.40	85.36	31.26	18.93	2.54	
3000.00	2981.32	3006.15	2987.06	6.81	6.84	125.40	-70.88	115.34	35.88	22.68	2.72	
3100.00	3073.87	3106.63	3079.94	7.33	7.37	120.37	-89.32	148.91	41.39	27.14	2.90	
3200.00	3164.67	3207.02	3170.98	7.95	7.99	116.17	-109.69	185.98	47.75	32.25	3.08	
3300.00	3253.57	3307.32	3260.00	8.65	8.70	112.69	-131.95	226.47	54.92	37.97	3.24	
3400.00	3340.56	3407.28	3346.86	9.46	9.50	110.02	-155.76	269.81	62.83	44.24	3.38	
3500.00	3427.16	3506.92	3433.15	10.31	10.35	108.16	-179.76	313.47	70.97	50.66	3.49	

Weatherford Drilling Services
Anticollision Report

Weatherford

Company:	Anadarko-Kerr-McGee	**Date:** 7/13/2007	**Time:** 08:54:01	**Page:**	2
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)				
Reference Site:	NBU 1022-13O2S	**Co-ordinate(NE) Reference:**	Site: NBU 1022-13O2S, Grid North		
Reference Well:	13O2S	**Vertical (TVD) Reference:**	SITE 5308.0		
Reference Wellpath:	1			**Db:**	Sybase

Site: NBU 1022-13O1CS
Well: Well #13O1CS
Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error: 0.00 ft

Reference MD ft	Reference TVD ft	Offset MD ft	Offset TVD ft	Semi-Major Axis Ref ft	Semi-Major Axis Offset ft	TFO-HS deg	Offset Location North ft	Offset Location East ft	Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
3600.00	3513.76	3606.57	3519.45	11.20	11.23	106.69	-203.75	357.14	79.18	57.09	3.58	
3700.00	3600.36	3706.21	3605.74	12.11	12.13	105.49	-227.75	400.80	87.43	63.50	3.65	
3800.00	3686.97	3805.86	3692.04	13.04	13.05	104.51	-251.74	444.46	95.71	69.92	3.71	
3900.00	3773.57	3905.50	3778.33	13.99	13.99	103.67	-275.74	488.13	104.01	76.33	3.76	
4000.00	3860.17	4005.14	3864.63	14.95	14.94	102.97	-299.73	531.79	112.34	82.73	3.79	
4100.00	3946.77	4104.79	3950.92	15.92	15.90	102.36	-323.73	575.45	120.67	89.13	3.83	
4200.00	4033.38	4204.43	4037.22	16.89	16.87	101.82	-347.72	619.12	129.02	95.52	3.85	
4300.00	4119.98	4304.08	4123.51	17.88	17.85	101.36	-371.72	662.78	137.38	101.92	3.87	
4400.00	4206.58	4403.72	4209.80	18.87	18.83	100.94	-395.71	706.44	145.75	108.31	3.89	
4500.00	4293.18	4503.37	4296.10	19.87	19.81	100.58	-419.71	750.11	154.12	114.69	3.91	
4600.00	4379.79	4603.01	4382.39	20.87	20.81	100.25	-443.70	793.77	162.50	121.08	3.92	
4700.00	4466.39	4702.65	4468.69	21.87	21.80	99.95	-467.70	837.43	170.89	127.46	3.93	
4800.00	4552.99	4802.30	4554.98	22.88	22.80	99.68	-491.69	881.10	179.27	133.84	3.95	
4900.00	4639.59	4901.94	4641.28	23.89	23.80	99.43	-515.69	924.76	187.67	140.22	3.96	
5000.00	4726.33	5001.59	4727.57	24.83	24.80	99.19	-539.68	968.42	196.02	146.62	3.97	
5100.00	4814.14	5101.21	4813.85	25.50	25.81	98.42	-563.67	1012.08	204.05	152.95	3.99	
5200.00	4903.17	5200.76	4900.06	26.14	26.81	97.01	-587.64	1055.70	211.79	159.00	4.01	
5300.00	4993.36	5300.15	4986.13	26.75	27.82	95.03	-611.58	1099.25	219.44	164.99	4.03	
5400.00	5084.66	5399.32	5072.02	27.33	28.83	92.54	-635.46	1142.71	227.23	171.20	4.06	
5500.00	5176.99	5498.21	5157.66	27.88	29.83	89.62	-659.27	1186.04	235.47	178.07	4.10	
5600.00	5270.29	5596.97	5243.20	28.39	30.81	86.32	-683.04	1229.29	244.49	185.93	4.18	
5700.00	5364.50	5697.03	5330.70	28.86	31.50	83.02	-706.41	1271.82	254.18	194.97	4.29	
5800.00	5459.56	5797.58	5419.88	29.30	32.16	79.95	-728.78	1312.53	264.31	204.64	4.43	
5900.00	5555.40	5898.60	5510.68	29.70	32.80	77.08	-750.11	1351.34	274.77	214.83	4.58	
6000.00	5651.95	6000.12	5603.06	30.05	33.40	74.41	-770.37	1388.20	285.51	225.45	4.75	
6100.00	5749.15	6102.12	5696.98	30.37	33.96	71.90	-789.52	1423.06	296.45	236.42	4.94	
6200.00	5846.93	6204.61	5792.40	30.65	34.50	69.55	-807.55	1455.87	307.52	247.67	5.14	
6300.00	5945.23	6307.60	5889.24	30.88	34.99	67.34	-824.42	1486.56	318.69	259.12	5.35	
6400.00	6043.97	6411.08	5987.47	31.08	35.44	65.26	-840.09	1515.08	329.90	270.73	5.58	
6500.00	6143.10	6515.07	6087.03	31.23	35.86	63.28	-854.54	1541.38	341.11	282.45	5.82	
6600.00	6242.53	6619.54	6187.84	31.35	36.23	61.40	-867.74	1565.40	352.29	294.23	6.07	
6700.00	6342.21	6724.52	6289.86	31.43	36.56	59.61	-879.67	1587.10	363.40	306.04	6.34	
6800.00	6442.06	6830.00	6393.00	31.46	36.85	57.89	-890.28	1606.41	374.42	317.84	6.62	
6900.00	6542.02	6935.97	6497.20	31.46	37.09	56.25	-899.56	1623.30	385.32	329.61	6.92	
7000.00	6642.02	7042.47	6602.42	31.45	37.29	163.75	-907.48	1637.71	395.92	353.37	9.31	
7100.00	6742.02	7149.75	6708.84	31.49	37.45	162.38	-914.03	1649.62	405.03	362.41	9.50	
7200.00	6842.02	7257.73	6816.28	31.53	37.56	161.36	-919.16	1658.96	412.26	369.59	9.66	
7300.00	6942.02	7366.22	6924.50	31.57	37.63	160.65	-922.84	1665.66	417.49	374.78	9.78	
7400.00	7042.02	7475.06	7033.24	31.62	37.65	160.23	-925.05	1669.67	420.63	377.92	9.85	
7500.00	7142.02	7583.85	7142.02	31.67	37.63	160.10	-925.76	1670.97	421.65	387.60	12.38	
7600.00	7242.02	7683.85	7242.02	31.72	37.66	160.10	-925.76	1670.97	421.65	387.44	12.33	
7700.00	7342.02	7783.85	7342.02	31.77	37.71	160.10	-925.76	1670.97	421.65	387.26	12.26	
7800.00	7442.02	7883.85	7442.02	31.82	37.75	160.10	-925.76	1670.97	421.65	387.08	12.20	
7900.00	7542.02	7983.85	7542.02	31.87	37.79	160.10	-925.76	1670.97	421.65	386.90	12.13	
8000.00	7642.02	8083.85	7642.02	31.92	37.84	160.10	-925.76	1670.97	421.65	386.71	12.07	
8100.00	7742.02	8183.85	7742.02	31.98	37.89	160.10	-925.76	1670.97	421.65	386.52	12.00	
8200.00	7842.02	8283.85	7842.02	32.03	37.94	160.10	-925.76	1670.97	421.65	386.32	11.93	
8300.00	7942.02	8383.85	7942.02	32.09	37.99	160.10	-925.76	1670.97	421.65	386.12	11.87	
8400.00	8042.02	8483.85	8042.02	32.15	38.04	160.10	-925.76	1670.97	421.65	385.91	11.80	
8500.00	8142.02	8571.83	8130.00	32.21	38.08	160.10	-925.76	1670.97	421.82	385.89	11.74	
8507.98	8150.00	8571.83	8130.00	32.21	38.08	160.10	-925.76	1670.97	422.12	386.18	11.74	

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-13K-3T, #1022-13O4S, #1022-13O1CS, #1022-13O2S, #1022-13D4S, #1022-13I3S, #1022-13O1AS, #1022-13J4S, #1022-13I4S, #1022-13L4S, #1022-13L3S, #1022-13K3S, #1022-13M2AS, #1022-13N2S, #1022-13N1S, #1022-13M2CS & #1022-13M1S
SECTION 13, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.3 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 12.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 3.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHWESTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 5.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 58.7 MILES.

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-13K-3T, #1022-13O4S, #1022-13O1CS, #1022-13O2S, #1022-13K4S, #1022-13I3S, #1022-13O1AS, #1022-13J4S, #1022-13I4S, #1022-13L4S, #1022-13L3S, #1022-13K3S, #1022-13M2AS, #1022-13N2S, #1022-13N1S, #1022-13M2CS & #1022-13M1S

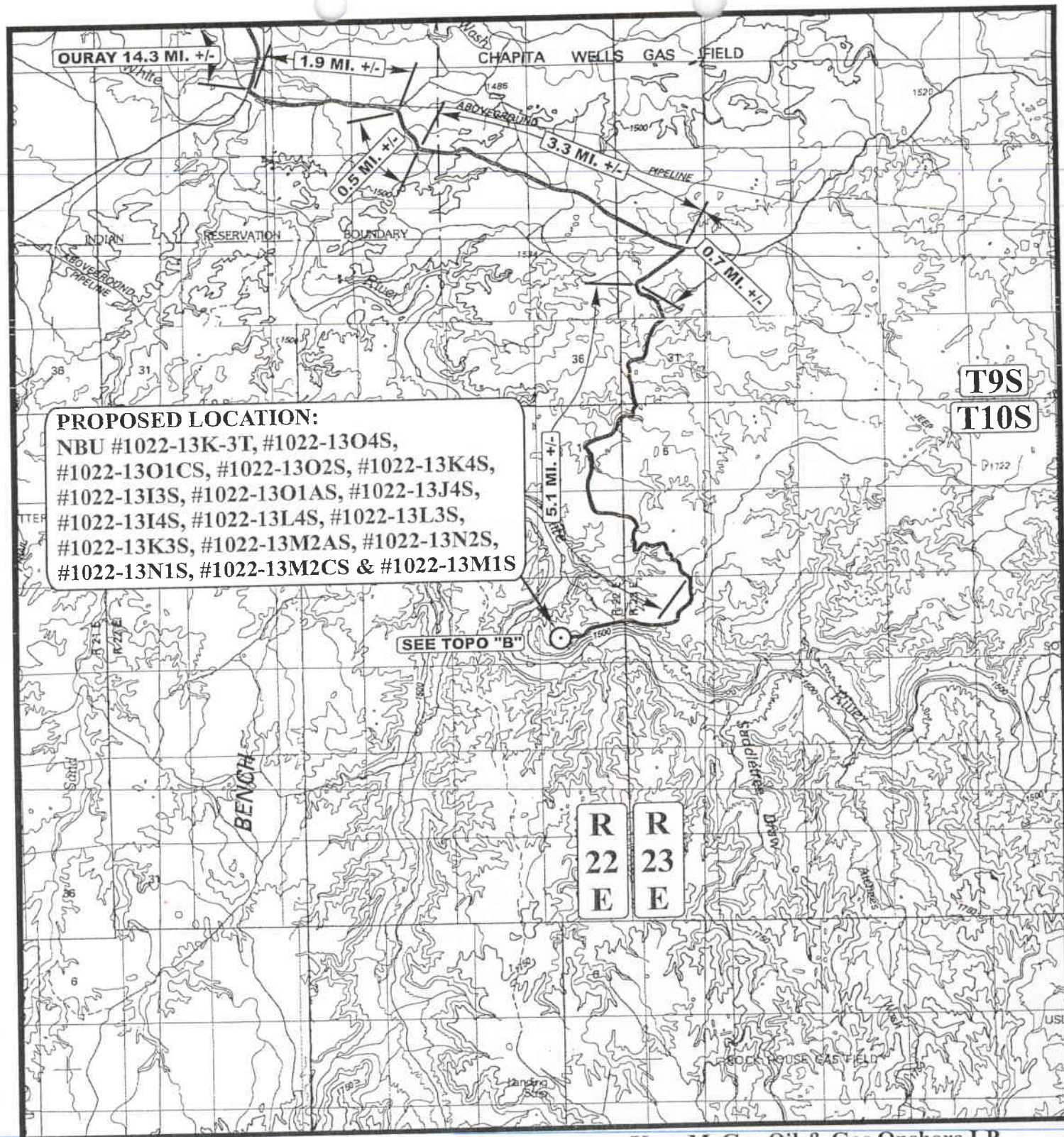
LOCATED IN UINTAH COUNTY, UTAH
SECTION 13, T10S, R22E, S.L.B.&M.

PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES **CAMERA ANGLE: SOUTHERLY**

PHOTO: VIEW OF EXISTING ACCESS **CAMERA ANGLE: WESTERLY**

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com
- Since 1964 -

LOCATION PHOTOS	05 MONTH	17 DAY	07 YEAR	PHOTO
TAKEN BY: L.K.	DRAWN BY: C.P.	REVISED: 00-00-00		



LEGEND:

⊙ PROPOSED LOCATION

N

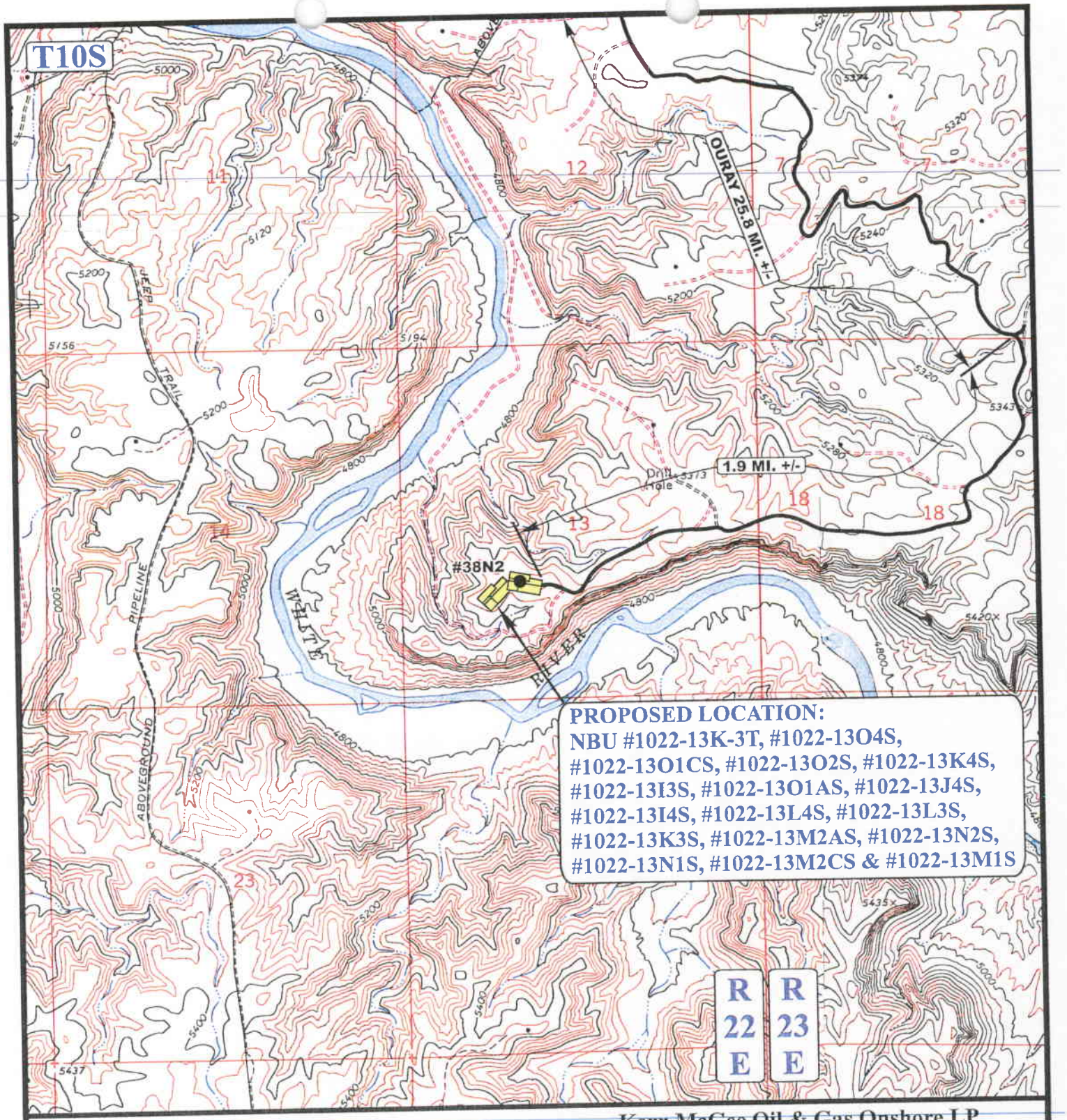
Kerr-McGee Oil & Gas Onshore LP

NBU#1022-13K-3T, #1022-13O4S, #1022-13O1CS, #1022-13O2S, #1022-13K4S, #1022-13I3S, #1022-13O1AS, #1022-13J4S, #1022-13I4S, #1022-13L4S, #1022-13L3S, #1022-13K3S, #1022-13M2AS, #1022-13N2S, #1022-13N1S, #1022-13M2CS & #1022-13M1S

SECTION 13, T10S, R22E, S.L.B.&M.; SW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	17 DAY	07 YEAR
SCALE: 1:100,000	DRAWN BY: C.P.	REVISED: 00-00-00	A TOPO



LEGEND:

EXISTING ROAD

PROPOSED ACCESS ROAD

N

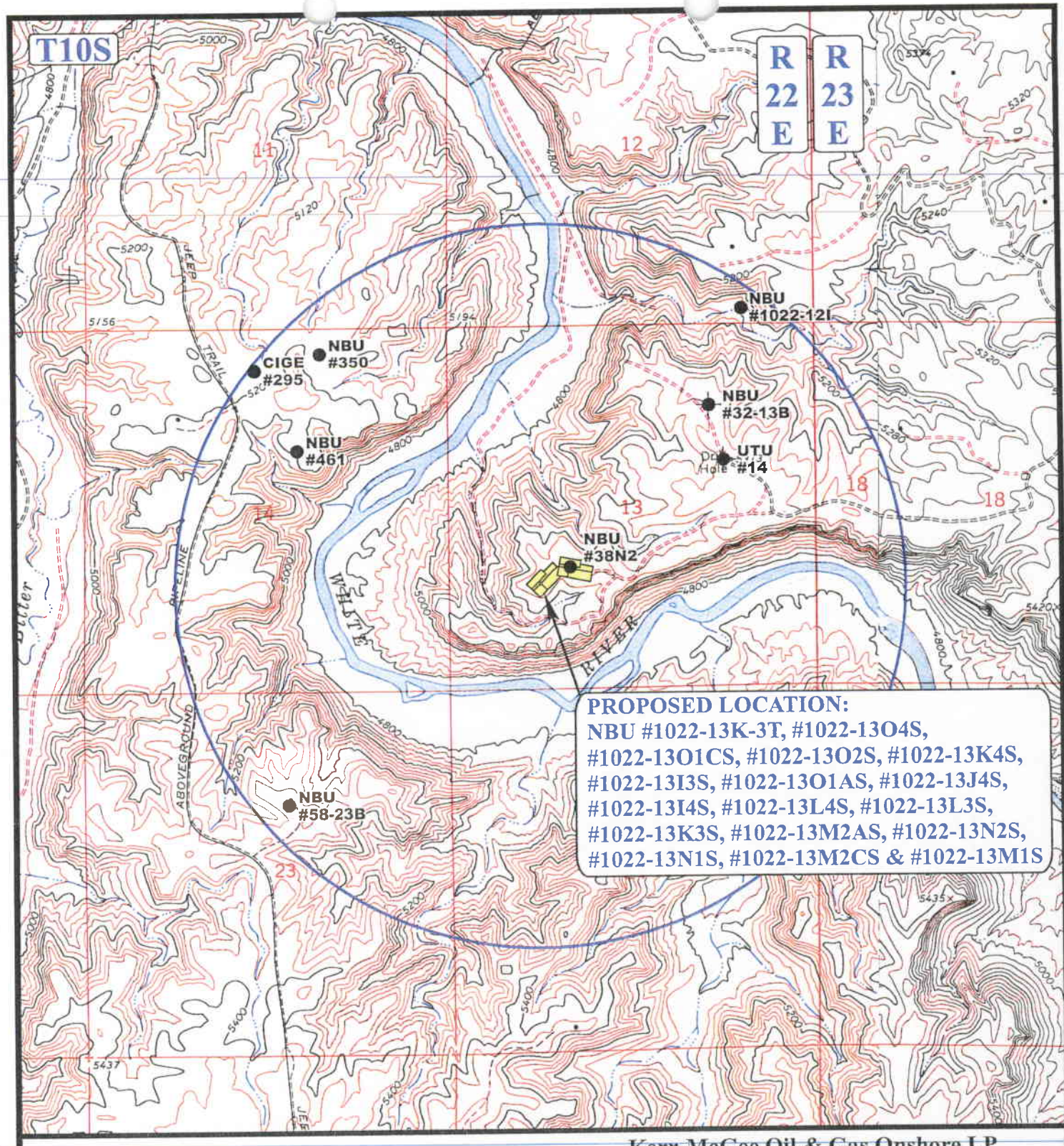
Kerr-McGee Oil & Gas Onshore LP

NBU#1022-13K-3T, #1022-13O4S, #1022-13O1CS, #1022-13O2S, #1022-13K4S, #1022-13I3S, #1022-13O1AS, #1022-13J4S, #1022-13I4S, #1022-13L4S, #1022-13L3S, #1022-13K3S, #1022-13M2AS, #1022-13N2S, #1022-13N1S, #1022-13M2CS & #1022-13M1S

SECTION 13, T10S, R22E, S.L.B.&M.; SW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	17 DAY	07 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 00-00-00		



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

N

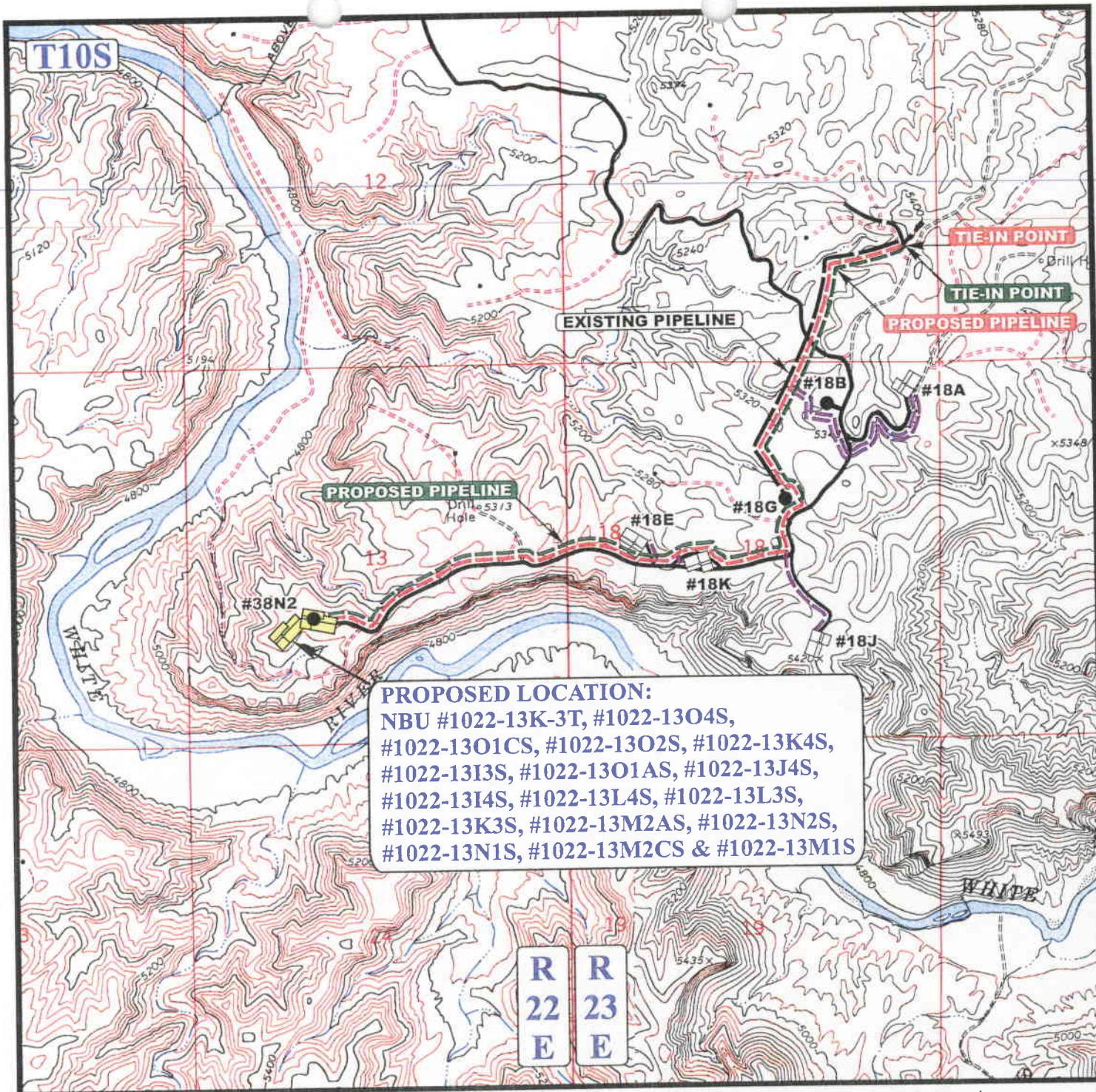
Kerr-McGee Oil & Gas Onshore LP

NBU#1022-13K-3T, #1022-13O4S, #1022-13O1CS, #1022-13O2S, #1022-13K4S, #1022-13I3S, #1022-13O1AS, #1022-13J4S, #1022-13I4S, #1022-13L4S, #1022-13L3S, #1022-13K3S, #1022-13M2AS, #1022-13N2S, #1022-13N1S, #1022-13M2CS & #1022-13M1S

SECTION 13, T10S, R22E, S.L.B.&M.; SW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	17 DAY	07 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 00-00-00		



APPROXIMATE TOTAL 10" PIPELINE DISTANCE = 12,184' +/-

APPROXIMATE TOTAL 6" PIPELINE DISTANCE = 12,184' +/-

Kerr-McGee Oil & Gas Onshore LP

NBU#1022-13K-3T, #1022-13O4S, #1022-13O1CS, #1022-13O2S, #1022-13K4S, #1022-13I3S, #1022-13O1AS, #1022-13J4S, #1022-13I4S, #1022-13L4S, #1022-13L3S, #1022-13K3S, #1022-13M2AS, #1022-13N2S, #1022-13N1S, #1022-13M2CS & #1022-13M1S

SECTION 13, T10S, R22E, S.L.B.&M.; SW 1/4

LEGEND:

- EXISTING ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)

N

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	17 DAY	07 YEAR	D TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 07-19-07		

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-13K-3T, #1022-13O4S, #1022-13O1CS, #1022-13O2S, #1022-13K4S, #1022-13I3S, #1022-13O1AS, #1022-13J4S, #1022-13I4S, #1022-13L4S, #1022-13L3S, #1022-13K3S, #1022-13M2AS, #1022-13N2S, #1022-13N1S, #1022-13M2CS & #1022-13M1S

PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH
SECTION 13, T10S, R22E, S.L.B.&M.

PHOTO: VIEW FROM TIE-IN POINT **CAMERA ANGLE: WESTERLY**

PHOTO: VIEW OF PIPELINE ALIGNMENT **CAMERA ANGLE: WESTERLY**

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

PIPELINE PHOTOS	05 MONTH	17 DAY	07 YEAR	PHOTO
TAKEN BY: L.K.	DRAWN BY: C.P.	REVISED: 00-00-00		

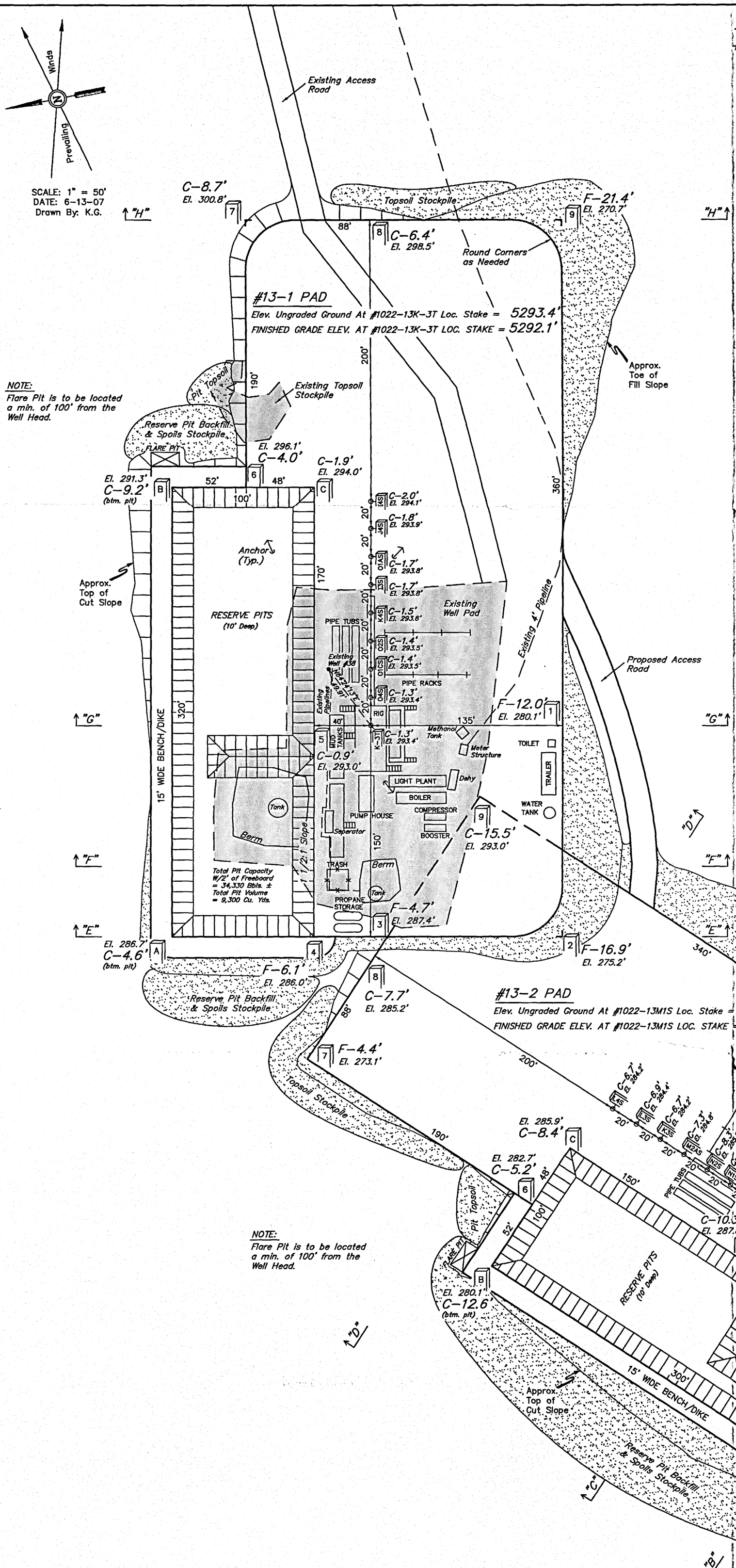
Kerr-McGee Oil & Gas Onshore LP

FIGURE #1

LOCATION LAYOUT FOR

NBU #1022-13K-3T, #1022-1304S, #1022-1301CS, #1022-1302S, #1022-13K4S, #1022-1313S, #1022-1301AS, #1022-13J4S, #1022-1314S, #1022-13L4S, #1022-13L3S, #1022-13K3S, #1022-13M2AS, #1022-13N2S, #1022-13N1S, #1022-13M2CS & #1022-13M1S
SECTION 13, T10S, R22E, S.L.B.&M.
SW 1/4

REGISTERED LAND SURVEYOR No. 161319 STATE OF UTAH



UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

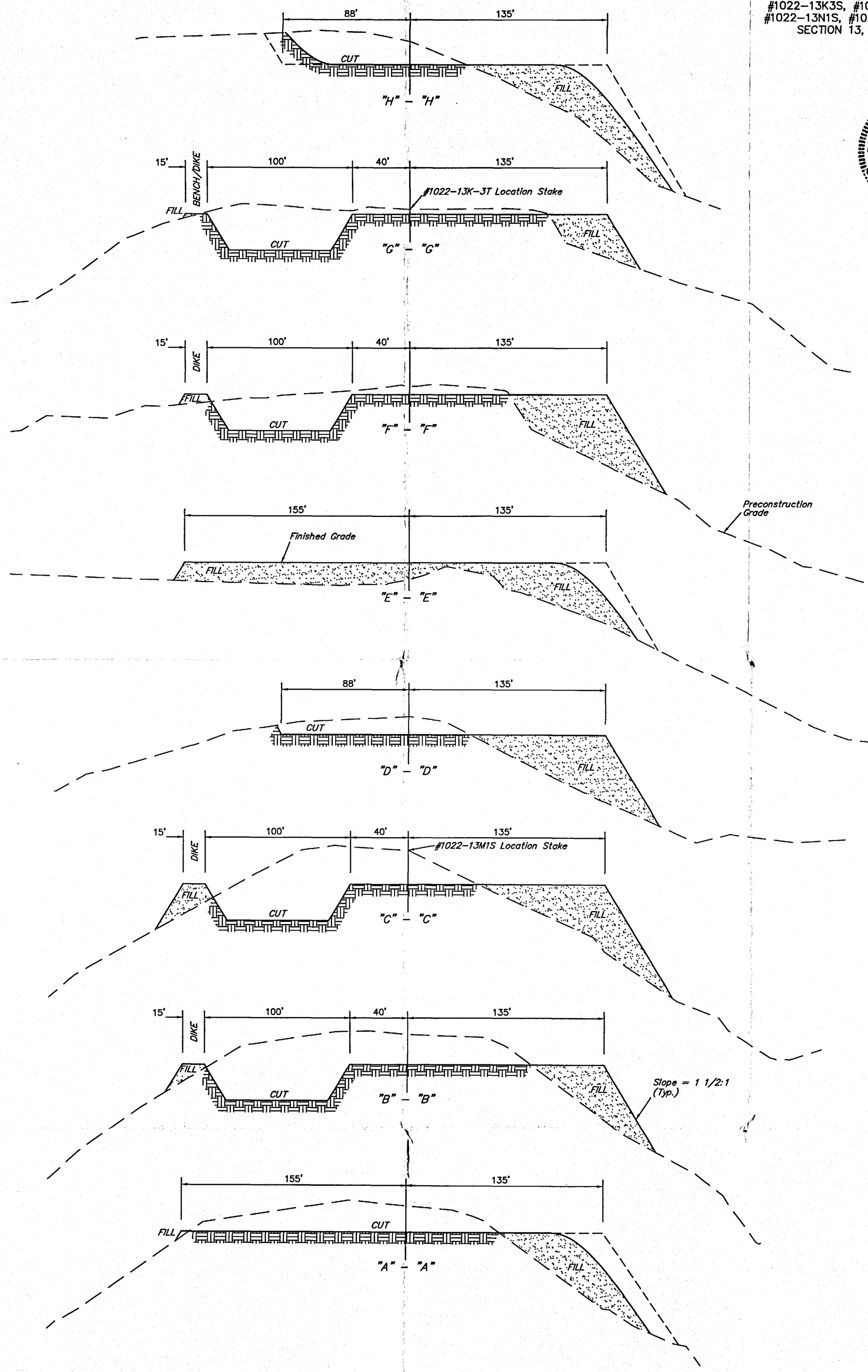
1" = 20'
X-Section Scale
1" = 50'
DATE: 6-13-07
Drawn By: K.G.

FIGURE #2

Kerr-McGee Oil & Gas Onshore LP

TYPICAL CROSS SECTIONS FOR
NBU #1022-13K-3T, #1022-1304S, #1022-1301CS, #1022-1302S, #1022-13K4S, #1022-1313S, #1022-1301AS, #1022-13J4S, #1022-1314S, #1022-13L4S, #1022-13L3S, #1022-13K3S, #1022-13M2AS, #1022-13N2S, #1022-13N1S, #1022-13M2CS & #1022-13M1S
SECTION 13, T10S, R22E, S.L.B.&M.
SW 1/4

REGISTERED LAND SURVEYOR
ROBERT L. KAY
STATE OF UTAH



NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE YARDAGES FOR #13-1 PAD

CUT		
(6") Topsoil Stripping	= 3,160	Cu. Yds.
Remaining Location	= 18,230	Cu. Yds.
TOTAL CUT	= 21,390	CU.YDS.
FILL	= 13,580	CU.YDS.
EXCESS MATERIAL	= 7,810	Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 7,810	Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 0	Cu. Yds.

APPROXIMATE YARDAGES FOR #13-2 PAD

CUT		
(6") Topsoil Stripping	= 2,860	Cu. Yds.
Remaining Location	= 24,050	Cu. Yds.
TOTAL CUT	= 26,910	CU.YDS.
FILL	= 19,710	CU.YDS.
EXCESS MATERIAL	= 7,200	Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 7,200	Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 0	Cu. Yds.

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

Kerr–McGee Oil & Gas Onshore LP

INTERFERENCE DETAIL FOR

NBU #1022–13K–3T, #1022–1304S, #1022–1301CS, #1022–1302S, #1022–13K4S, #1022–1313S, #1022–1301AS, #1022–13J4S, #1022–1314S, #1022–13L4S, #1022–13L3S, #1022–13K3S, #1022–13M2AS, #1022–13N2S, #1022–13N1S, #1022–13M2CS & #1022–13M1S

SECTION 13, T10S, R22E, S.L.B.&M.

SW 1/4

SCALE: 1" = 50'
DATE: 6–13–07
Drawn By: K.G.

REGISTERED LAND SURVEYOR
161319
ROBERT L. KAY
STATE OF UTAH

N71°03'05"E – 572.46'
(TO BOTTOM HOLE)

N85°46'21"E – 2262.08'
(TO BOTTOM HOLE)

N88°47'55"E – 1596.94'
(TO BOTTOM HOLE)

S83°06'30"E – 3003.85'
(TO BOTTOM HOLE)

S77°40'24"E – 1966.72'
(TO BOTTOM HOLE)

S68°50'44"E 1571.28'
(TO BOTTOM HOLE)

S59°04'24"E – 1888.67'
(TO BOTTOM HOLE)

S51°44'10"E – 2082.22'
(TO BOTTOM HOLE)

BOTTOM HOLE

K–3T
04S
01CS
02S
K4S
13S
01AS
J4S
14S

#13–1 PAD

S69°00'59"E
669.54'

S50°26'27"E – 833.55'
(TO BOTTOM HOLE)

S38°09'47"E – 1070.27'
(TO BOTTOM HOLE)

L4S
L3S
K3S
12AS
IN2S
IN1S
M2CS
M1S

#13–2 PAD

N64°19'00"W – 743.01'
(TO BOTTOM HOLE)

N86°53'51"W – 766.22'
(TO BOTTOM HOLE)

S69°14'51"W – 789.64'
(TO BOTTOM HOLE)

S44°24'53"W – 850.29'
(TO BOTTOM HOLE)

S52°30'36"W – 1316.92'
(TO BOTTOM HOLE)

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789–1017

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/06/2007

API NO. ASSIGNED: 43-047-39479

WELL NAME: NBU 1022-13O2S
OPERATOR: KERR-MCGEE OIL & GAS (N2995)
CONTACT: SHEILA UPCHEGO

PHONE NUMBER: 435-781-7024

PROPOSED LOCATION:
NESW 13 100S 220E
SURFACE: 1743 FSL 1725 FWL
SWSE BOTTOM: 1175 FSL 2055 FEL
COUNTY: UINTAH
LATITUDE: 39.94645 LONGITUDE: -109.3909
UTM SURF EASTINGS: 637468 NORTHINGS: 4422844
FIELD NAME: NATURAL BUTTES (630)

INSPECT LOCATN BY: / /		
Tech Review	**Initials**	**Date**
Engineering	DKD	8/31/07
Geology		
Surface		

LEASE TYPE: 3 - State
LEASE NUMBER: STUO-08512-ST
SURFACE OWNER: 3 - State

PROPOSED FORMATION: WSMVD
COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

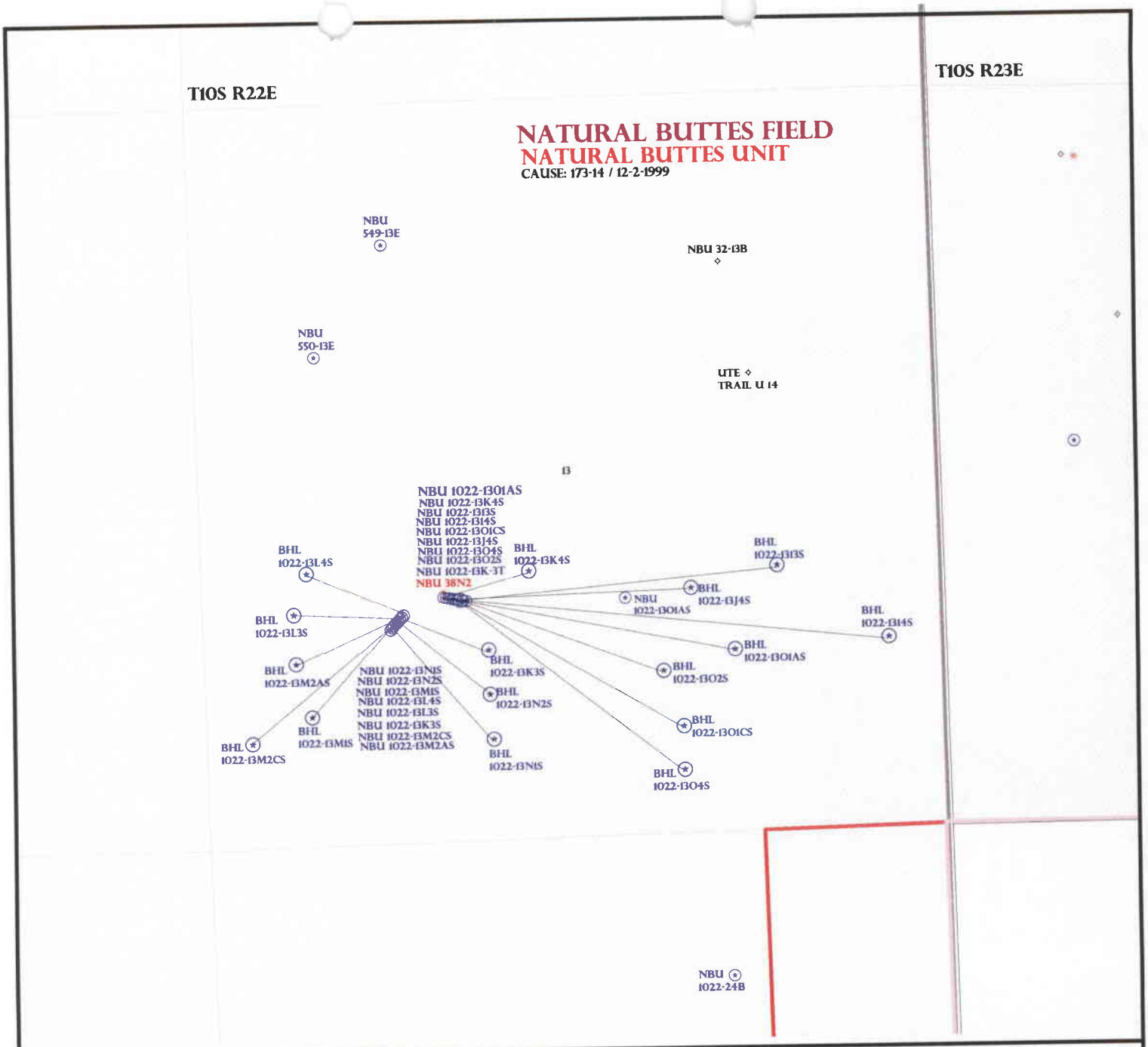
✓ Plat
✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. 22013542)
N Potash (Y/N)
Y Oil Shale 190-5 (B) or 190-3 or 190-13
✓ Water Permit
(No. 43-8496)
N RDCC Review (Y/N)
(Date:)
N/A Fee Surf Agreement (Y/N)
N/A Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.
Unit: NATURAL BUTTES
___ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
___ R649-3-3. Exception
✓ Drilling Unit
Board Cause No: 173-14
Eff Date: 12-2-1999
Siting: 460' Fr Ubdry & Uncomm Tracts
✓ R649-3-11. Directional Drill

COMMENTS: Need(s) Presite (06-27-07)

STIPULATIONS: 1- Statement of Basis
2- Oil Shale
3- Surface Csg Cmt Stip



OPERATOR: KERR MCGEE O&G (N2995)

SEC: 13 T.10S R. 22E

FIELD: NATURAL BUTTES (630)

COUNTY: UINTAH

CAUSE: 173-14 / 12-2-1999

Field Status
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

Unit Status
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Wells Status
- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING

Utah Oil Gas and Mining

N
W E
S

PREPARED BY: DIANA MASON

DATE: 8-AUGUST-2007

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
486	43-047-39479-00-00		GW	S	No

Operator KERR-MCGEE OIL & GAS ONSHORE, LP **Surface Owner-APD**
Well Name NBU 1022-13O2S **Unit**
Field UNDESIGNATED **Type of Work**
Location NESW 13 10S 22E S 1743 FSL 1725 FWL GPS Coord (UTM) 637468E 4422844N

Geologic Statement of Basis

Kerr McGee proposes to set 2,100' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 4,300'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 13. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill	8/15/2007
APD Evaluator	**Date / Time**

Surface Statement of Basis

The general area is in the southeast end of the Natural Buttes Unit, which contains the White River and short rugged drainages that drain into the White River. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River varies from ¼ mile to 2 miles. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 43 air miles to the northwest. Access from Ouray, Utah is approximately 27.7 road miles following Utah State, Uintah County and oilfield development roads to the location.

Seventeen new gas wells are proposed on two connected pads. The pads form a dogleg with the upper pad (#13-1) extending in an east-west direction and the lower pad (#13-2) in a northeast to southwest direction. Corners of the pads overlap with fill from the upper pad, corner 2, extending onto the lower pad at corner 9. Finished elevation of the upper pad is 15 feet higher than the lower pad. A road is proposed on the inside of the dog-leg ramping down to the lower pad. The pads are located on top of a medium width to narrow ridge-top elevated about 500 vertical feet above the White River. The White River forms a bend in the area and somewhat surrounds the locations except on the east-northeast sides. Closest horizontal distance to any well is approximately 1550 feet. Slopes from the ridge steepen and become near vertical sandstone ledges short distances from the pads. Soils are shallow with a rocky subsurface. Except for reserve pit construction blasting is not expected to be required. Pad construction will primarily consist of excavating the top of the ridge filling on the sides of the ridge All fills will catch on existing natural side slopes. No drainage concerns exist. Elongated reserve pits are planned. Pits will be in cut except along corner 'C' on the lower #13-2 pad and corner 'F' on the upper #13-1 pad. Both areas will be reinforced with embankments which include a 15' wide bench and spoils storage. Reserve pits will be lined with double 20 mil. liners and a appropriate thickness of sub felt to cushion all rocks. A pad for a producing gas well (NBU #38-N2) exist on a portion of the upper pad. Area encompassed for the pads not including spoils storage is approximately 6.7 acres.

When the wells are completed the west tank on the west corner of the upper pad will be in view for about 1/8 mile along the river bottom. Even though rafters would have to look behind them to see this tank, Kerr McGee agreed to use a low profile tank for this location.

Both the surface and minerals for this location are owned by SITLA. Jim Davis of SITLA attended the pre-site visit and expressed no concerns regarding the proposed location except for those discussed above.

The location appears to be the only site for constructing pads and drilling and operating multiple wells in the area.

It was mutually agreed that the most significant environmental concern with drilling and operating wells in this area was to avoid any leaks or spills from the operations reaching the White River. To reduce chances of this happening, Carroll Estes of Kerr McGee committed to line the pit with a double 20 mil liner with an appropriate thickness of felt sub-liner dependent upon the roughness of the surface of the constructed pit. He also stated they would formulate and follow a plan to monitor the level of fluids in the reserve pit as well as observing the surrounding terrain for any possible leaks. Corrugated metal containments will be constructed around all tanks used for production.

Floyd Bartlett	6/27/2007
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A double synthetic liner each with a minimum thickness of 20 mils and an appropriate thickness of felt sub-liner to cushion the liners shall be properly installed and maintained in the reserve pit.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, LP
Well Name NBU 1022-13O2S
API Number 43-047-39479-0 **APD No** 486 **Field/Unit** UNDESIGNATED
Location: 1/4,1/4 NESW **Sec** 13 **Tw** 10S **Rng** 22E 1743 FSL 1725 FWL
GPS Coord (UTM) 637478 4422848 **Surface Owner**

Participants

Floyd Bartlett (DOGM), Jim Davis (SITLA), Carroll Estes, Tony Kznick, and Clay Einerson (Kerr McGee), David Kay (Uintah Engineering and Land Surveying), and Daniel Emmett (UDWR)

Regional/Local Setting & Topography

The general area is in the southeast end of the Natural Buttes Unit, which contains the White River and short rugged drainages that drain into the White River. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River varies from ¼ mile to 2 miles. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 43 air miles to the northwest. Access from Ouray, Utah is approximately 27.7 road miles following Utah State, Uintah County and oilfield development roads to the location.

Seventeen new gas wells are proposed on two connected pads. The pads form a dogleg with the upper pad (#13-1) extending in an east-west direction and the lower pad (#13-2) in a northeast to southwest direction. Corners of the pads overlap with fill from the upper pad, corner 2, extending onto the lower pad at corner 9. Finished elevation of the upper pad is 15 feet higher than the lower pad. A road is proposed on the inside of the dog-leg ramping down to the lower pad. The pads are located on top of a medium width to narrow ridge-top elevated about 500 vertical feet above the White River. The White River forms a bend in the area and somewhat surrounds the locations except on the east-northeast sides. Closest horizontal distance to any well is approximately 1550 feet. Slopes from the ridge steepen and become near vertical sandstone ledges short distances from the pads. Soils are shallow with a rocky subsurface. Except for reserve pit construction blasting is not expected to be required. Pad construction will primarily consist of excavating the top of the ridge filling on the sides of the ridge All fills will catch on existing natural side slopes. No drainage concerns exist. Elongated reserve pits are planned. Pits will be in cut except along corner 'C' on the lower #13-2 pad and corner 'F' on the upper #13-1 pad. Both areas will be reinforced with embankments which include a 15' wide bench and spoils storage. Reserve pits will be lined with double 20 mil. liners and a appropriate thickness of sub felt to cushion all rocks. A pad for a producing gas well (NBU #38-N2) exist on a portion of the upper pad. Area encompassed for the pads not including spoils storage is approximately 6.7 acres.

Both the surface and minerals for this location are owned by SITLA.

Surface Use Plan

Current Surface Use
Grazing
Recreational
Wildlfe Habitat
Existing Well Pad

New Road Miles	Well Pad		Src Const Material	Surface Formation
0	**Width** 290	**Length** 510	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Moderately vegetated with black sagebrush, halogeton, shadscale, rabbit brush, broom snakeweed, cheatgrass, six-week fescue and spring annuals.

Antelope, coyote, small mammals and birds. Winter domestic sheep grazing

Soil Type and Characteristics

Shallow gravely sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? Y **Paleo Potental Observed?** N **Cultural Survey Run?** Y **Cultural Resources?**

Reserve Pit

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	>200	0
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	<300	20
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)	<10	0
Affected Populations	<10	0
Presence Nearby Utility Conduits	Not Present	0
	Final Score	35 1 **Sensitivity Level**

Characteristics / Requirements

The reserve pit is proposed on the northwest corner of the upper pad. Portions of the outer edge will be within partial fill. A 15' wide bench/dike is planned along the outer edge as well as reserve pit spoils storage along the west end. Finished pit dimensions are 100' x 320' x 10' deep. Carroll Estes of Kerr McGee committed to line the pit with a double 20 mil liner with an appropriate thickness of felt sub-liner dependent upon the roughness of the surface of the constructed pit.

Mr. Estes also stated they would formulate and follow a plan to monitor the level of fluids in the reserve pit as well as observing the surrounding terrain for any possible leaks.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 40 **Pit Underlayment Required?** Y

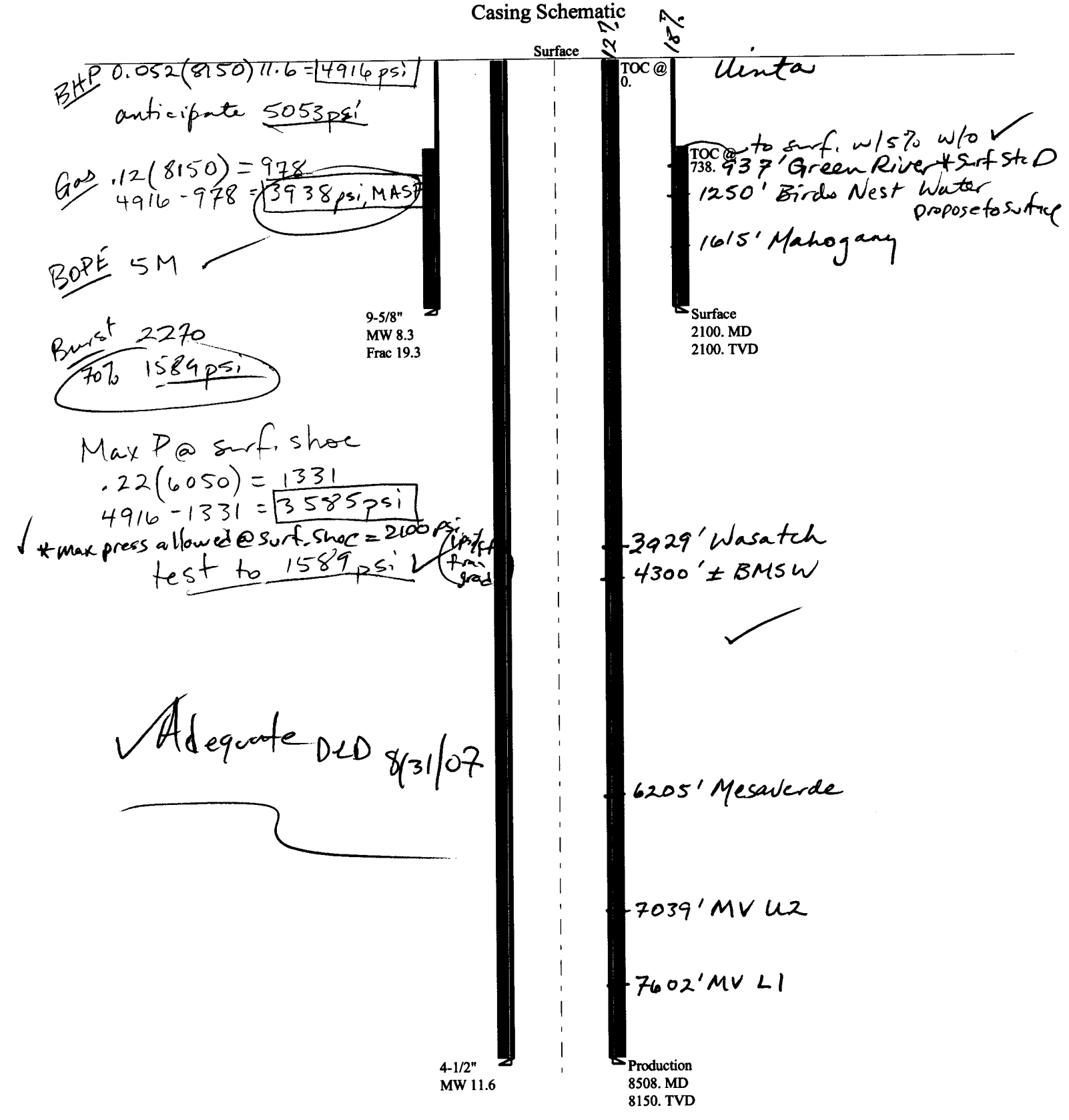
Other Observations / Comments

Daniel Emmet represented the Utah Division of Wildlife Resources. Mr. Emmet stated the area is classified as critical yearlong habitat for antelope. He however recommended no stipulations for this species as the loss of forage from this location is not significant and water not forage is the factor limiting the herd population in the area. No other wildlife is expected to be affected. He gave Carrol Estes, representing Kerr McGee, and Jim Davis copies of his evaluation and a DWR recommended seed mix to use when re-vegetating the area.

Floyd Bartlett	6/27/2007
Evaluator	**Date / Time**

2007-08 Kerr McGee NBU 1022-13O2S

Casing Schematic



Well name:	**2007-08 Kerr McGee NBU 1022-13O2S**
Operator:	**Kerr McGee Oil & Gas Onshore L.P.**
String type:	Surface
Project ID:	43-047-39479
Location:	Uintah County, Utah

Design parameters:

Collapse
Mud weight: 8.300 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 1,848 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,100 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 1,844 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 104 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,300 ft

Cement top: 738 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 8,150 ft
Next mud weight: 11.600 ppg
Next setting BHP: 4,911 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,100 ft
Injection pressure: 2,100 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	2100	9.625	32.30	H-40	ST&C	2100	2100	8.876	927.9

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	905	1370	1.513	2100	2270	1.08	60	254	4.26 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Minerals
Phone: (801) 538-5357
FAX: (801) 359-3940
Date: August 27,2007
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 2100 ft, a mud weight of 8.3 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**2007-08 Kerr McGee NBU 1022-13O2S**
Operator:	**Kerr McGee Oil & Gas Onshore L.P.**
String type:	Production
Project ID:	43-047-39479
Location:	Uintah County, Utah

Design parameters:

Collapse
Mud weight: 11.600 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 3,118 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 4,911 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 7,095 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 189 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: Surface

Directional Info - Build & Drop
Kick-off point 2160 ft
Departure at shoe: 1617 ft
Maximum dogleg: 2.5 °/100ft
Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	8508	4.5	11.60	I-80	LT&C	8150	8508	3.875	742.5

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	4911	6360	1.295	4911	7780	1.58	78	212	2.71 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Minerals
Phone: (801) 538-5357
FAX: (801) 359-3940
Date: August 27,2007
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 8150 ft, a mud weight of 11.6 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

KerrMcGee

Kerr McGee Oil and Gas Onshore LP
1368 South 1200 East • Vernal, UT 84078
435-789-4433 • Fax 435-781-7094

July 31, 2007

Diana Whitney
State of Utah
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-5801

RE: Directional Drilling R649-3-11
NBU 1022-13O2S 1743'FSL, 1725'FWL (Surface)
1175'FSL, 2055'FEL (Bottomhole)
Uintah County, Utah

Dear Ms. Whitney:

Pursuant to filling of Kerr McGee Oil & Gas Onshore L.P. Application for Permit to Drill regarding the above referenced well on July 31, 2007, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to location and siting of wells.

- NBU 1022-13O2S is located within the Natural Buttes Unit Area.
- Kerr McGee Oil & Gas Onshore L.P., is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr McGee Oil & Gas Onshore L.P., will be able to utilize the existing road and pipeline in the area.
- Furthermore, Kerr McGee Oil & Gas Onshore L.P. hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr McGee Oil & Gas Onshore L.P. requests that the permit be granted pursuant to R649-3-11.

Sincerely,

Sheila Upchego
Senior Land Admin Specialist

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

August 9, 2007

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2007 Plan of Development Natural Buttes Unit
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Wasatch/MesaVerde)		
43-047-39473	NBU 1022-13K4S	Sec 13 T10S R22E 1739 FSL 1745 FWL
	BHL	Sec 13 T10S R22E 1925 FSL 2280 FWL
43-047-39474	NBU 1022-1313S	Sec 13 T10S R22E 1735 FSL 1764 FWL
	BHL	Sec 13 T10S R22E 1900 FSL 1225 FEL
43-047-39475	NBU 1022-1314S	Sec 13 T10S R22E 1724 FSL 1824 FWL
	BHL	Sec 13 T10S R22E 1360 FSL 0440 FEL
43-047-39476	NBU 1022-1301CS	Sec 13 T10S R22E 1747 FSL 1705 FWL
	BHL	Sec 13 T10S R22E 0775 FSL 1920 FEL
43-047-39477	NBU 1022-13J4S	Sec 13 T10S R22E 1728 FSL 1804 FWL
	BHL	Sec 13 T10S R22E 1760 FSL 1845 FEL
43-047-39478	NBU 1022-1301AS	Sec 13 T10S R22E 1731 FSL 1784 FWL
	BHL	Sec 13 T10S R22E 1310 FSL 1540 FEL
43-047-39479	NBU 1022-1302S	Sec 13 T10S R22E 1743 FSL 1725 FWL
	BHL	Sec 13 T10S R22E 1175 FSL 2055 FEL

43-047-39480 NBU 1022-1304S	Sec 13 T10S R22E 1750 FSL 1686 FWL
BHL	Sec 13 T10S R22E 0460 FSL 1925 FEL
43-047-39481 NBU 1022-13K3S	Sec 13 T10S R22E 1610 FSL 1343 FWL
BHL	Sec 13 T10S R22E 1370 FSL 1975 FWL
43-047-39482 NBU 1022-13M1S	Sec 13 T10S R22E 1538 FSL 1275 FWL
BHL	Sec 13 T10S R22E 0930 FSL 0700 FWL
43-047-39483 NBU 1022-13M2AS	Sec 13 T10S R22E 1595 FSL 1329 FWL
BHL	Sec 13 T10S R22E 1315 FSL 0600 FWL
43-047-39484 NBU 1022-13N1S	Sec 13 T10S R22E 1566 FSL 1302 FWL
BHL	Sec 13 T10S R22E 0725 FSL 1990 FWL
43-047-39485 NBU 1022-13L3S	Sec 13 T10S R22E 1624 FSL 1356 FWL
BHL	Sec 13 T10S R22E 1665 FSL 0590 FWL
43-047-39486 NBU 1022-13L4S	Sec 13 T10S R22E 1638 FSL 1370 FWL
BHL	Sec 13 T10S R22E 1960 FSL 0690 FWL
43-047-39487 NBU 1022-13N2S	Sec 13 T10S R22E 1581 FSL 1316 FWL
BHL	Sec 13 T10S R22E 1050 FSL 1975 FWL
43-047-39488 NBU 1022-13M2CS	Sec 13 T10S R22E 1552 FSL 1289 FWL
BHL	Sec 13 T10S R22E 0750 FSL 0270 FWL
43-047-39489 NBU 1022-13K-3T	Sec 13 T10S R22E 1754 FSL 1666 FWL

Our records indicate the bottom hole location of the NBU 1022-1314S is closer than 460 feet from the Natural Buttes Unit boundary.

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:8-9-07

From: Ed Bonner
To: Mason, Diana
Date: 8/20/2007 3:07 PM
Subject: Well Clearance

CC: Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil

The following wells have been given cultural resources clearance by the Trust Lands Cultural Resources Group:

Cabot Oil & Gas Corporation
McKenna 21-32 (API 43 037 31863)

Kerr McGee Oil & Gas Onshore LP
NBU 1022-13K4S (API 43 047 39473)
NBU 1022-13I3S (API 43 047 39474)
NBU 1022-13I4S (API 43 047 39475)
NBU 1022-13O1CS (API 43 047 39476)
NBU 1022-13J4S (API 43 047 39477)
NBU 1022-13O1AS (API 43 047 39478)
NBU 1022-13O2S (API 43 047 39479)
NBU 1022-13O4S (API 43 047 39480)
NBU 1022-13K3S (API 43 047 39481)
NBU 1023-13M1S (API 43 047 39482)
NBU 1022-13M2AS (API 43 047 39483)
NBU 1022-13N1S (API 43 047 39484)
NBU 1022-13L3S (API 43 047 39485)
NBU 1022-13L4S (API 43 047 39486)
NBU 1022-13N2S (API 43 047 39487)
NBU 1022-13M2SC (API 43 047 39488)
NBU 1022-13K-3T (API 43 047 39489)

Petro-Canada Resources (USA), Inc
State 16-41 (API 43 015 30721)
State 32-44 (API 43 015 30722)

Royale Energy, Inc
Vernal Equinox 2-2 (API 43 019 31552)

XTO Energy, Inc
State of Utah 16-8-31-13 (API 43 015 30719)
State of Utah 16-8-31-33D (API 43 015 30718)

If you have any questions regarding this matter please give me a call.

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA
Division Director

September 4, 2007

Kerr McGee Oil & Gas Onshore LP
1368 S 1200 E
Vernal, UT 84078

Re: Natural Buttes Unit 1022-13O2S Well, 1743' FSL, 1725' FWL, NE SW, Sec. 13, T. 10 South, R. 22 East, Bottom Location 1175' FSL, 2055' FEL, SW SE, Sec. 13, T. 10 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39479.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Uintah County Assessor
SITLA
Bureau of Land Management, Vernal Office

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • www.ogm.utah.gov

UTAH DNR OIL, GAS & MINING

Operator: Kerr McGee Oil & Gas Onshore LP

Well Name & Number Natural Buttes Unit 1022-13O2S

API Number: 43-047-39479

Lease: STUO-08512-ST

Location:	NE SW	**Sec.** 13	**T.** 10 South	**R.** 22 East
Bottom Location:	SW SE	**Sec.** 13	**T.** 10 South	**R.** 22 East

Conditions of Approval

1. **General**

   Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. **Notification Requirements**

   The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

   - 24 hours prior to cementing or testing casing – contact Dan Jarvis
   - 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
   - 24 hours prior to spudding the well – contact Carol Daniels
   - Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
   - Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

   The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

   - Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
   - Any changes to the approved drilling plan – contact Dustin Doucet

   The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

   - Dan Jarvis at: (801) 538-5338 office (801) 942-0873 home
   - Carol Daniels at: (801) 538-5284 office
   - Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

3. **Reporting Requirements**

   All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

6. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

7. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

8. Surface casing shall be cemented to the surface.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP
Operator Account Number: N 2995
Address: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078
Phone Number: (435) 781-7024

Well 1

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304739479	NBU 1022-13O2S	NESW	13	10S	22E	UINTAH

Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date
B	99999	2900	11/13/2007	11/26/07

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 11/13/2007 AT 12:00 PM. BHL = SWSE

Well 2

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304739476	NBU 1022-13O1CS	NESW	13	10S	22E	UINTAH

Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date
B	99999	2900	11/13/2007	11/26/07

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 11/13/2007 AT 9:00 AM. BHL = SWSE

Well 3

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304739473	NBU 1022-13K4S	NESW	13	10S	22E	UINTAH

Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date
B	99999	2900	11/13/2007	11/26/07

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 11/13/2007 AT 1500 HRS BHL = NESW

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA UPCHEGO
Name (Please Print)
Signature
SENIOR LAND SPECIALIST
Title
11/14/2007
Date

(5/2000)

RECEIVED
NOV 14 2007
DIV. OF OIL, GAS & MINING

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: STUO-08512-ST

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: UNIT #891008900A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: NBU 1022-13O2S

2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP

9. API NUMBER: 4304739479

3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078

PHONE NUMBER: (435) 781-7024

10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1743'FSL, 1725'FWL

COUNTY: UINTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 13 10S 22E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
Date of work completion:	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: WELL SPUD
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX.

SPUD WELL LOCATION ON 11/13/2007 AT 12:00 PM.

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE SENIOR LAND ADMIN SPECIALIST

SIGNATURE Sheila Upchego DATE 11/14/2007

RECEIVED
NOV 20 2007
DIV. OF OIL, GAS & MINING

(This space for State use only)

(5/2000) (See Instructions on Reverse Side)

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: STUO-08512-ST

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: UNIT #891008900A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: NBU 1022-13O2S

2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP

9. API NUMBER: 4304739479

3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078

PHONE NUMBER: (435) 781-7024

10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1743'FSL, 1725'FWL

COUNTY: UINTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 13 10S 22E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: SET SURFACE CSG
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU BILL MARTIN AIR RIG ON 12/12/2007. DRILLED 12 1/4" SURFACE HOLE TO 2170'. RAN 9 5/8" 36# J-55 SURFACE CSG. LEAD CMT W/200 SX HIFILL CLASS G @11..0 PPG 3.82 YIELD. TAILED CMT W/200 SX PREM CLASS G @15.8 PPG 1.15 YIELD. GOOD RETURNS NO LEAD CMT TO SURFACE 500 PSI LIFT. TAN 200' OF 1" PIPE. CMT W/125 SX PREM CLASS G @15.8 PPG 1.15 YIELD. NO CMT TO SURFACE. TOP OUT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIELD. DOWN BACKSIDE GOOD CMT TO SURFACE HOLE STAYED FULL.

WORT.

RECEIVED
DEC 24 2007
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE SENIOR LAND ADMIN SPECIALIST

SIGNATURE DATE 12/17/2007

(This space for State use only)

(5/2000) (See Instructions on Reverse Side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER: STUO-08512-ST

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: UNIT #891008900A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: NBU 1022-13O2S

2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP

9. API NUMBER: 4304739479

3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078

PHONE NUMBER: (435) 781-7024

10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1743'FSL, 1725'FWL

COUNTY: UINTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 13 10S 22E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: FINAL DRILLING OPERATIONS
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

FINISHED DRILLING FROM 2170' TO 8548' ON 02/23/2008. RAN 4 1/2" 11.6 # I-80 PRODUCTION CSG. LEAD CMT W/315 SX PREM LITE II @11.0 PPG 3.38 YIELD. TAILED CMT W/1260 SX 50/50 POZ @14.3 PPG 1.31 YIELD. DROP PLUG & DISPLACE W/132.2 BBLS FRESH WATER BUMP PLUG @2850 (500 OVER CIRC PSI) FLOATS HELD W/1.5 BBLS. 40 BBLS CMT TO PIT W/GOOD RETURNS THROUGH OUT JOB. SET SLIPS W/95K N/D MAKE ROUGH CUT L/OUT SAME CLEAN PITS.

RELEASED ENSIGN RIG 83 ON 02/25/2008 AT 0300 HRS.

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE SENIOR LAND ADMIN SPECIALIST

SIGNATURE DATE 2/25/2008

(This space for State use only)

RECEIVED
MAR 0 3 2008
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER: STUO-08512-ST

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: UNIT #891008900A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: NBU 1022-13O2S

2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP

9. API NUMBER: 4304739479

3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078

PHONE NUMBER: (435) 781-7024

10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1743'FSL, 1725'FWL

COUNTY: UINTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 13 10S 22E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: PRODUCTION START-UP
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE SUBJECT WELL LOCATION WAS PLACED ON PRODUCTION ON 05/17/2008 AT 11:00 AM.

PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE SENIOR LAND ADMIN SPECIALIST

SIGNATURE DATE 5/19/2008

(This space for State use only)

RECEIVED
MAY 21 2008
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

WINS No.: 95379	NBU 1022-13O-2S	Start Date: 11/13/2007
AFE No.: 2008171	Operation Summary Report	End Date: 2/25/2008

Operator	FIELD NAME	SPUD DATE	GL	KB	ROUTE
KERR-MCGEE OIL & GAS ONSHORE LP	NATURAL BUTTES	11/13/07	5,293	5310	

API	STATE	COUNTY	DIVISION
4304739479	UTAH	UINTAH	ROCKIES

Lat./Long.: Lat./Long.: 39.94643 / -109.39144 **Q-Q/Sect/Town/Range:** / 13 / 10S / 22E **Footages:** 1,737.00' FSL 1,725.00' FWL

MTD	TVD	LOG MD	PBMD	PBTVD
8548	8194			

EVENT INFORMATION: EVENT ACTIVITY: DRILLING
OBJECTIVE: DEVELOPMENT
OBJECTIVE2:
REASON:
DATE WELL STARTED/RESUMED: .
Event End Status: COMPLETE

RIG OPERATIONS:	Begin Mobilization	Rig On Location	Rig Charges	Rig Operation Start	Finish Drilling	Rig Release	Rig Off Location
PETE MARTIN DRILLING / I	11/13/2007	11/13/2007	11/13/2007	11/13/2007	11/13/2007	11/13/2007	11/30/2007

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode	P/U	Operation
11/13/2007							
SUPERVISOR: LEW WELDON							
	12:00 - 18:00	6.00	DRLCON	02		P	MOVE IN AND RIG UP BUCKET RIG SPUD WELL 2 1200 HJR 11/13/07 DRILL AND SET 40' OF SCHEDULE 10 PIPE DRILL RODENT HOLES FOR RIG 83 BLM AND STATE NOTFIED OF SPUD
11/30/2007							
SUPERVISOR: LEW WELDON							
	8:00 - 18:00	10.00	DRLSUR	02		P	MOVE IN AND RIG UP AIR RIG SPUD WELL 2 0800 HR 11/30/07 DRILL TO 870' AND SDFN
	18:00 - 0:00	6.00	DRLSUR	12		P	SDFN
12/1/2007							
SUPERVISOR: LEW WELDON							
	0:00 - 6:00	6.00	DRLSUR	12		P	WAIT ON BILL JR AIR RIG
	6:00 - 10:00	4.00	DRLSUR	02		P	RIH TO 870' AND DRILL TO 1020' T/D PIOLET HOLE CONDITION HOLE 1 HR AND POOH
	10:00 - 0:00	14.00	DRLSUR	12		P	WOAR
12/12/2007							
SUPERVISOR: LEW WELDON							
	0:00 - 21:00	21.00	DRLSUR	12		P	WAIT ON BILL JR AIR RIG
	21:00 - 0:00	3.00	DRLSUR	02		P	MOVE OVER AND RIG UP AIR RIG RIH TO 1020' AND SPUD WELL @ 2100 HR 12/12/07 DA AT REPORT TIME 1200'
12/13/2007							
SUPERVISOR: LEW WELDON							
	0:00 - 12:00	12.00	DRLSUR	02		P	RIG DRILLING AHEAD CIRCULATING WITH SKID PUMP FULL RETURNS 1590'
	12:00 - 0:00	12.00	DRLSUR	02		P	RIG DRILLING AHEAD CIRCULATING WITH SKID PUMP FULL RETURNS 1920'
12/14/2007							
SUPERVISOR: LEW WELDON							
	0:00 - 8:00	8.00	DRLSUR	02		P	RIG T/D @ 2170' CONDITION HOLE 1 HR
	8:00 - 11:00	3.00	DRLSUR	05		P	TRIP DP OUT OF HOLE WITH FULL RETURNS
	11:00 - 15:30	4.50	DRLSUR	11		P	RUN 2127' OF 9 5/8 CSG AND 200' OF 1" PIPE RIG DOWN AIR RIG
	15:30 - 16:30	1.00	DRLSUR	15		P	CEMENT 1ST STAGE WITH 200 SKS LEAD @ 11# 3.82 23 GAL/SK AND 200 SKS TAIL @ 15.8# 1.15 5.0 GAL/SK GOOD RETURNS NO LEAD CMT TO SURFACE 500 PSI LIFT
	16:30 - 17:00	0.50	DRLSUR	15		P	1ST TOP JOB 125 SKS DOWN 1" PIPE NO CMT TO SURFACE WOC

Wins No.: 95379	NBU 1022-13O-2S	API No.: 4304739479
EVENT INFORMATION:	EVENT ACTIVITY: DRILLING	REASON:
	OBJECTIVE: DEVELOPMENT	DATE WELL STARTED/RESUMED:
	OBJECTIVE2:	Event End Status: COMPLETE

RIG OPERATIONS:	Begin Mobilization	Rig On Location	Rig Charges	Rig Operation Start	Finish Drilling	Rig Release	Rig Off Location
PETE MARTIN DRILLING / I	11/13/2007	11/13/2007	11/13/2007	11/13/2007	11/13/2007	11/13/2007	11/30/2007

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode	P/U	Operation
	17:00 - 19:00	2.00	DRLSUR	15		P	2ND TOP JOB 100 SKS DOWN BS GOOD CMT TO SURFACE AND STAYED AT SURFACE
	19:00 - 0:00	5.00	DRLSUR	12		P	NO VISIBLE LEAKS WORT
2/14/2008							
SUPERVISOR: SID ARMSTRONG							
	0:00 - 20:00	20.00	DRLPRO	01	C	P	R/D & SKID RIG & R/U
	20:00 - 22:30	2.50	DRLPRO	13	A	P	NIPPLE UP B.O.P'S & R/U FLARE LINES
	22:30 - 0:00	1.50	DRLPRO	13	C	P	TEST B.O.P'S
2/15/2008							
SUPERVISOR: SID ARMSTRONG							
	0:00 - 2:30	2.50	DRLPRO	13	C	P	FINISH TESTING B.O.P'S
	2:30 - 10:30	8.00	DRLPRO	05	A	P	P/U MUD MOTOR & DIR TOOLS & INSPECT BHA & T.I.H & INSTALL ROTHEAD & DRIVERS
	10:30 - 13:30	3.00	DRLPRO	02	F	P	DRILL CEMENT & FLOAT EQUIPMENT
	13:30 - 0:00	10.50	DRLPRO	02	D	P	DRILL & SURVEY F/ 2170 TO 2800 - 630' @ 60.0 FPH - WT 8.3/37
2/16/2008							
SUPERVISOR: SID ARMSTRONG							
	0:00 - 15:00	15.00	DRLPRO	02	D	P	DRILL & SURVEY F/ 2800 TO 3489 - 689' @ 45.9 FPH WT 8.6 VIS 41
	15:00 - 15:30	0.50	DRLPRO	06	A	P	SER RIG
	15:30 - 0:00	8.50	DRLPRO	02	D	P	DRILL - SURVEY F/ 3489 TO - 3940 - 451 @ 53.0 FPH WT 8.9 VIS 41
2/17/2008							
SUPERVISOR: SID ARMSTRONG							
	0:00 - 14:30	14.50	DRLPRO	02	D	P	DRILL- SURVEY F/ 3940 TO 4537 - 597' @ 41.1 FPH - WT 9.2 VIS 42
	14:30 - 15:00	0.50	DRLPRO	02	D	P	SER RIG
	15:00 - 0:00	9.00	DRLPRO	02	D	P	DRILL-SURVEY F/ 4537 TO 4840 - 303' @ 33.6 FPH - WT 9.2 VIS 42
2/18/2008							
SUPERVISOR: SID ARMSTRONG							
	0:00 - 14:30	14.50	DRLPRO	02	D	P	DRILL-SURVEY F/ 4840 TO 5247 - 407' @ 28.0 FPH- MUD WT 9.7 VIS 42
	14:30 - 15:00	0.50	DRLPRO	06	A	P	RIG SER
	15:00 - 0:00	9.00	DRLPRO	02	D	P	DRILL-SURVEY F/ 5247 TO 5550 - 303 @ 33.6 FPH- MUD WT 9.7 VIS 42
2/19/2008							
SUPERVISOR: STUART NEILSON							
	0:00 - 14:00	14.00	DRLPRO	02	D	P	DRILL-SURVEY F/ 5550 TO 6187 - 637' @ 45.5' PH - MUD WT 9.9 VIS 40
	14:00 - 14:30	0.50	DRLPRO	06	A	P	SERVICE RIG
	14:30 - 0:00	9.50	DRLPRO	02	D	P	DRLG-SURVEY F/ 6187 TO 6495 - 308' @ 32.4' PH W/ 10.1 PPG - 40 VIS
2/20/2008							
SUPERVISOR: STUART NEILSON							
	0:00 - 15:30	15.50	DRLPRO	02	D	P	DRLG-SLIDE F/ 6495 TO 6857 362' @ 23.3' PH W/ 10.2 PPG - 41 VIS
	15:30 - 16:00	0.50	DRLPRO	06	A	P	SERVICE RIG
	16:00 - 0:00	8.00	DRLPRO	02	D	P	DRLG-SLIDE-SURVEY F/ 6857 TO 7040 183' @ 22.8' PH W/ 10.3 PPG - 42 VIS

Wins No.: 95379	NBU 1022-13O-2S	API No.: 4304739479

EVENT INFORMATION: EVENT ACTIVITY: DRILLING | REASON:
OBJECTIVE: DEVELOPMENT | DATE WELL STARTED/RESUMED:
OBJECTIVE2: | Event End Status: COMPLETE

RIG OPERATIONS:	Begin Mobilization	Rig On Location	Rig Charges	Rig Operation Start	Finish Drilling	Rig Release	Rig Off Location
PETE MARTIN DRILLING /	11/13/2007	11/13/2007	11/13/2007	11/13/2007	11/13/2007	11/13/2007	11/30/2007

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode	P/U	Operation
2/21/2008							
SUPERVISOR: STUART NEILSON							
	0:00 - 8:30	8.50	DRLPRO	02	D	P	DRLG/SLID F\ 7040 TO 7240 200' @ 23.5' PH W/ 10.2 PPG 42 VIS
	8:30 - 17:00	8.50	DRLPRO	05	A	P	TFNB,L/D DIR TOOLS & MM, P/U BIT#2 & MM, TIH WASH 60' TO BOTTOM W/ 10' FILL
	17:00 - 0:00	7.00	DRLPRO	02	B	P	DRLG F/ 7240 TO 7540 300' @ 42.9' PH W/ 10.5 PPG - 42 VIS
2/22/2008							
SUPERVISOR: STUART NEILSON							
	0:00 - 14:30	14.50	DRLPRO	02	B	P	DRLG F/ 7540 TO 8163 623' @ 42.9' PH W/ 11.1 PPG - 44 VIS
	14:30 - 15:00	0.50	DRLPRO	06	A	P	SERVICE RIG
	15:00 - 0:00	9.00	DRLPRO	02	B	P	DRLG F/ 8163 TO 8513 350' @ 38.8' PH W/ 11.2 PPG - 44 VIS
2/23/2008							
SUPERVISOR: STUART NEILSON							
	0:00 - 1:00	1.00	DRLPRO	02	B	P	DRLG F/ 8513 TO MD 8548 TD - TVD 8194 35' @ 35' PH W/ 11.3 PPG - 44 VIS
	1:00 - 2:30	1.50	DRLPRO	04	C	P	CCH F/ SHORT TRIP
	2:30 - 9:00	6.50	DRLPRO	05	E	P	SHORT TRIP 69 STDS TO SHOE
	9:00 - 10:30	1.50	DRLPRO	04	C	P	CCH
	10:30 - 14:30	4.00	DRLPRO	05	B	P	POOH F/ LOGS
	14:30 - 20:30	6.00	DRLPRO	10	C	P	HPJSM W/RIG & LOGGING CREWS R/U & RUN QUAD- COMBO LOG, LOGGERS DEPTH 8541' R/D
	20:30 - 21:30	1.00	DRLPRO	05	E	P	TIH, BHA & 10 STDS
	21:30 - 22:30	1.00	DRLPRO	06	D	P	CUT DRLG LINE
	22:30 - 0:00	1.50	DRLPRO	05	E	P	TIH
2/24/2008							
SUPERVISOR: STUART NEILSON							
	0:00 - 2:00	2.00	DRLPRO	05	E	P	TIH
	2:00 - 3:00	1.00	DRLPRO	04	C	P	CCH
	3:00 - 10:30	7.50	DRLPRO	05	D	P	HPJSM W/ RIG & L/D CREWS, R/U & LDDS, STAND BACK 10 STDS D/P & 10 STDS HWDP, PULL WEAR BUSHING
	10:30 - 17:30	7.00	DRLPRO	11	B	P	HPJSM W/ RIG & CASING CREWS, R/U & RUN 8548' 4 1/2" CASING, R/D
	17:30 - 19:30	2.00	DRLPRO	04	C	P	CCH
	19:30 - 22:30	3.00	DRLPRO	15	A	P	HPJSM W/ RIG & CEMENTING CREWS, R/U, TEST LINES & POP OFF TO 3500 PSI, PUMP 20 BBLS MUD CLEAN, SCAV 20 SKS, 9.5 PPG, 8.45 YLD - LEAD 315 SKS, 11 PPG,3.38 YLD - TAIL 1260 SKS, 14.3 PPG, 1.31 YLD,DROP PLUG & DISPLACE W/ 132.2 BBLS F/W, BUMP PLUG @ 2850 (500 OVER CIRC PSI), FLOAT HELD W/ 1.5 BBLS BACK TO TRUCK, 40 BBLS CEMENT TO PIT W/ GOOD RETURNS THOUGH OUT JOB
	22:30 - 0:00	1.50	DRLPRO	13	A	P	SET SLIPS W/ 95K, N/D, MAKE ROUGH CUT & LAYOUT SAME, CLEAN PITS
2/25/2008							
SUPERVISOR: STUART NEILSON							
	0:00 - 3:00	3.00	DRLPRO	01	F	P	CLEAN PITS REALESE RIG @ 03:00 AM 2/25/08

WINS No.: 95379	NBU 1022-13O-2S	Start Date: 5/9/2008
AFE No.: 2008171	Operation Summary Report	End Date:

Operator	FIELD NAME	SPUD DATE	GL	KB	ROUTE
KERR-MCGEE OIL & GAS ONSHORE LP	NATURAL BUTTES	11/13/07	5,293	5310	

API	STATE	COUNTY	DIVISION
4304739479	UTAH	UINTAH	ROCKIES

Lat./Long.: Lat./Long.: 39.94643 / -109.39144 **Q-Q/Sect/Town/Range:** / 13 / 10S / 22E **Footages:** 1,737.00' FSL 1,725.00' FWL

MTD	TVD	LOG MD	PBMD	PBTVD
8548	8194			

EVENT INFORMATION: EVENT ACTIVITY: COMPLETION
OBJECTIVE: DEVELOPMENT
OBJECTIVE2: ORIGINAL
REASON: WHR PAD#1 - MV
DATE WELL STARTED/RESUMED:
Event End Status:

RIG OPERATIONS: Begin Mobilization Rig On Location Rig Charges Rig Operation Start Finish Drilling Rig Release Rig Off Location

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode	P/U	Operation
5/9/2008							
SUPERVISOR: DOUG CHIVERS							
	10:30 - 11:00	0.50	COMP	48		P	HSM. FRACING & PERFORATING

Wins No.: 95379	NBU 1022-13O-2S	API No.: 4304739479
EVENT INFORMATION:	EVENT ACTIVITY: COMPLETION	REASON: WHR PAD#1 - MV
	OBJECTIVE: DEVELOPMENT	DATE WELL STARTED/RESUMED:
	OBJECTIVE2: ORIGINAL	Event End Status:

RIG OPERATIONS: Begin Mobilization | Rig On Location | Rig Charges | Rig Operation Start | Finish Drilling | Rig Release | Rig Off Location

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode	P/U	Operation
	11:00 - 18:00	7.00	COMP	36	B	P	STG 1) RIH W/ 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 DEG PHASING. PERFORATE 8,436' - 40' 4 SPF, 8,430' - 32' 4 SPF, 8,392' - 94' 4 SPF, 8,321' - 23' 4 SPF, 40 HOLES. TRACE ALL FLUID W/ 186 GR CFT 1500. WHP 0 PSI, BRK 4,664 PSI @ 2.6 BPM, ISIP 2,376 PSI, FG .72. PUMP 100 BBLS @ 50 BPM @ 4,600 PSI = 30 OF 40 HOLES OPEN 74%. MP 6,286 PSI, MR 53 BPM, AP 4,574 PSI, AR 50.8 BPM, ISIP 2,208 PSI, FG .70, NPI -168 PSI. PUMP 1,421 BBLS OF SLK WATER & 41,211 LBS OF 30/50 SAND & 5,000 LBS OF 20/40 RESIN SAND. TOTAL PROP 46,211 LBS. STG 2) PU 4 1/2" CBP & RIH W/ 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 & 120 DEG PHASING. SET 8K BAKER CBP @ 8,143' & PERFORATE 8,108' - 13' 4 SPF, 7,984' - 88' 4 SPF, 7,955' - 58' 3 SPF, 45 HOLES. TRACE ALL FLUID W/ 292 GR CFT 2400. WHP 0 PSI, BRK 5,329 PSI @ 2.7 BPM, ISIP 2,668 PSI, FG .77. PUMP 100 BBLS @ 51 BPM @ 4,900 PSI = 27 OF 45 HOLES OPEN 61%. MP 6,303 PSI, MR 51 BPM, AP 5,476 PSI, AR 50.8 BPM, ISIP 2,543 PSI, FG .76, NPI -125 PSI. PUMP 1,379 BBLS OF SLK WATER & 42,766 LBS OF 30/50 SAND & 5,000 LBS OF 20/40 RESIN SAND. TOTAL PROP 47,766 LBS. STG 3) PU 4 1/2" CBP & RIH W/ 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 DEG PHASING. SET 8K BAKER CBP @ 7,859' & PERFORATE 7,824' - 29' 4 SPF, 7,745' - 48' 4 SPF, 7,738' - 40' 4 SPF, 40 HOLES. TRACE ALL FLUID W/ 138 GR CFT 2500. WHP 0 PSI, BRK 4,239 PSI @ 2.8 BPM, ISIP 2,795 PSI, FG .73. PUMP 100 BBLS @ 39.4 BPM @ 4,800 PSI = 28 OF 40 HOLES OPEN 92%. MP 4,958 PSI, MR 39.6 BPM, AP 4,389 PSI, AR 39 BPM, ISIP 2,639 PSI, FG .78, NPI 156 PSI. PUMP 1,009 BBLS OF SLK WATER & 28,891 LBS OF 30/50 SAND & 5,000 LBS OF 20/40 RESIN SAND. TOTAL PROP 33,891 LBS. STG 4) PU 4 1/2" CBP & RIH W/ 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 &120 DEG PHASING. SET 8K BAKER CBP @ 7,426' & PERFORATE 7,388' - 96' 4 SPF, 7,300' - 02' 3 SPF, 7,240' - 42' 3 SPF, 44 HOLES. TRACE ALL FLUID W/ 335 GR CFT 2100. WHP 0 PSI, BRK 3,259 PSI @ 2.8 BPM, ISIP 1,720 PSI, FG .68. PUMP 100 BBLS @ 53 BPM @ 4,400 PSI = 30 OF 44 HOLES OPEN 68%. MP 5,128 PSI, MR 53 BPM, AP 4,905 PSI, AR 52.9 BPM, ISIP 2,186 PSI, FG .74, NPI 466 PSI. PUMP 2,258 BBLS OF SLK WATER & 77,993 LBS OF 30/50 SAND & 5,000 LBS OF 20/40 RESIN SAND. TOTAL PROP 82,993 LBS. SWI SDFN
5/10/2008							
SUPERVISOR: DOUG CHIVERS							
	7:00 - 7:30	0.50	COMP	48		P	HSM. FRACING & PERFORATING

Wins No.: 95379	NBU 1022-13O-2S	API No.: 4304739479
EVENT INFORMATION:	EVENT ACTIVITY: COMPLETION	REASON: WHR PAD#1 - MV
	OBJECTIVE: DEVELOPMENT	DATE WELL STARTED/RESUMED:
	OBJECTIVE2: ORIGINAL	Event End Status:

RIG OPERATIONS: Begin Mobilization | Rig On Location | Rig Charges | Rig Operation Start | Finish Drilling | Rig Release | Rig Off Location

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode	P/U	Operation
	7:30 - 11:30	4.00	COMP	36	B	P	STG 5) PU 4 1/2" CBP & RIH W/ 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 120 DEG PHASING. SET 8K BAKER CBP @ 7,180' & PERFORATE 7,142' - 50' 3 SPF, 7,062' - 64' 3 SPF, 6,964' - 66' 3 SPF, 36 HOLES. TRACE ALL FLUID W/ 138 GR CFT 1400. WHP 100 PSI, BRK 2,729 PSI @ 3.0 BPM, ISIP 2,298 PSI, FG .77. PUMP 100 BBLS @ 51 BPM @ 4,600 PSI = 26 OF 36 HOLES OPEN 72%. MP 4,761 PSI, MR 51.3 BPM, AP 4,686 PSI, AR 51 BPM, ISIP 1,939 PSI, FG .71, NPI -359 PSI. PUMP 1,000 BBLS OF SLK WATER & 29,211 LBS OF 30/50 SAND & 5,000 LBS OF 20/40 RESIN SAND. TOTAL PROP 34,211 LBS. STG 6) PU 4 1/2" CBP & RIH W/ 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 DEG PHASING. SET 8K BAKER CBP @ 6,892' & PERFORATE 6,853' - 62' 4 SPF, 36 HOLES. TRACE ALL FLUID W/ 115 GR CFT 1800. WHP 550 PSI, BRK 2,982 PSI @ 3.0 BPM, ISIP 1,656 PSI, FG .68. PUMP 100 BBLS @ 39.5 BPM @ 3,650 PSI = 29 OF 36 HOLES OPEN 77%. MP 4,340 PSI, MR 41 BPM, AP 3,600 PSI, AR 39.5 BPM, ISIP 1,995 PSI, FG .73, NPI 339 PSI. PUMP 859 BBLS OF SLK WATER & 23,354 LBS OF 30/50 SAND & 5,000 LBS OF 20/40 RESIN SAND. TOTAL PROP 28,354 LBS. KILL PLG) PU 4 1/2" 8K BAKER CBP RIH SET @ 6,803. SWI WAIT FOR DRL OUT
5/16/2008							
SUPERVISOR: DOUG CHIVERS							
	7:00 - 7:30	0.50	COMP	48		P	DAY 3 - JSA & SM #3

Wins No.: 95379	NBU 1022-13O-2S	API No.: 4304739479
EVENT INFORMATION:	EVENT ACTIVITY: COMPLETION	REASON: WHR PAD#1 - MV
	OBJECTIVE: DEVELOPMENT	DATE WELL STARTED/RESUMED:
	OBJECTIVE2: ORIGINAL	Event End Status:

RIG OPERATIONS: Begin Mobilization | Rig On Location | Rig Charges | Rig Operation Start | Finish Drilling | Rig Release | Rig Off Location

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode	P/U	Operation
	7:30 - 19:00	11.50	COMP	44	C	P	RDMO NBU 1022-13'O'-1CS. MIRU ON NBU 1022-13'O'-2S. SPOT EQUIP. & RU RIG. OPEN WELL, 0 PSI. ND FRAC VALVES, NUBOP. R/U FLOOR & TBG EQUIP. PREP & TALLY TBG. P/U 3 7/8" BIT, POBS & XN NIPPLE. RIH ON NEW 2 3/8" J55 TBG. TAG FILL @ 6773'. R/U PWR SWVL & PMP. P.T. BOP TO 3000 PSI. EST. CIRC. W/2% KCL WTR. C/O 30' OF SND. CBP #1) DRLG OUT BAKER 8K CBP @ 6803' IN 8 MIN. 100 LBS DIFF. PSI. RIH, TAG SND @ 6862'. C/O 30' OF SND. FCP = 100 PSI. CBP #2) DRLG OUT BAKER 8K CBP @ 6892' IN 11 MIN. 300 LBS DIFF. PSI. RIH, TAG SND @ 7153'. C/O 30' OF SND. FCP = 150 PSI. CBP #3) DRLG OUT BAKER 8K CBP @ 7182' IN 12 MIN. 100 LBS DIFF. PSI. RIH, TAG SND @ 7396'. C/O 30' OF SND. FCP = 150 PSI. CBP #4) DRLG OUT BAKER 8K CBP @ 7426' IN 10 MIN. 200 LBS DIFF. PSI. RIH, TAG SND @ 7829'. C/O 30' OF SND. FCP = 200 PSI. CBP #5) DRLG OUT BAKER 8K CBP @ 7859' IN 10 MIN. 200 LBS DIFF. PSI. RIH, TAG SND @ 8113'. C/O 30' OF SND. FCP = 250 PSI. CBP #6) DRLG OUT BAKER 8K CBP @ 8143' IN 11 MIN. 500 LBS DIFF. PSI. RIH, TAG SND @ 8433'. C/O 60' OF SND. TO 8493'. PBTD = 8503 FCP = 300 PSI. POOH & L/D 55 JTS TBG ON FLOAT, (63 JTS TOTAL). LAND TBG ON HANGER W/215 JTS NEW 2 3/8" J55 TBG. EOT @ 6754.79' + POBS & XN NIPPLE @ 6774.82'. R/D FLOOR & TBG EQUIP. NDBOP, DROP BALL, NUWH. PMP OFF BIT @ 0000 PSI. WAIT 30 MIN. FOR BIT TO FALL TO BTM. 18:30 TURN WELL OVER TO FBC. SICP = 1550 PSI. FTP = 000 PSI. 19:00 SDFN - PREP TO RDMO IN AM.
5/18/2008							
SUPERVISOR: DOUG CHIVERS							
	11:00 -		PROD				TURN WELL TO SALES @ 1100 HR ON 5/18/2008 - FTP 1400#, CP 1500#, CK 20/64", 427 MCFD, 960 BWPD

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ (highlight changes) FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: STUO-08512-ST

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ DRY ☐ OTHER

7. UNIT or CA AGREEMENT NAME: UNIT #891008900A

b. TYPE OF WORK: NEW WELL ☑ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

8. WELL NAME and NUMBER: NBU 1022-13O2S

2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP

9. API NUMBER: 4304739479

3. ADDRESS OF OPERATOR: 1368 S 1200 E CITY VERNAL STATE UT ZIP 84078

PHONE NUMBER: (435) 781-7024

10 FIELD AND POOL, OR WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 1743'FSL, 1725'FWL per DKD review
AT TOP PRODUCING INTERVAL REPORTED BELOW:
AT TOTAL DEPTH: ~~1175'FSL, 2055'FEL~~ (SW/SE) 1220 fsl 2034 fel

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 13 10S 22E

12. COUNTY: UINTAH

13. STATE: UTAH

14. DATE SPUDDED: 11/13/2007

15. DATE T.D. REACHED: 2/23/2008

16. DATE COMPLETED: 5/17/2008 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): 5292'GL

18. TOTAL DEPTH: MD 8,548 TVD 8,194

19. PLUG BACK T.D.: MD 8,504 TVD 8,150

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
CBL-CCL-GR, Comp 2, CD, CN, Cal, HDI

23.
WAS WELL CORED? NO ☑ YES ☐ (Submit analysis)
WAS DST RUN? NO ☑ YES ☐ (Submit report)
DIRECTIONAL SURVEY? NO ☐ YES ☑ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20"	14" STL	36.7#		40		28			
12 1/4"	9 5/8 J-55	36#		2,170		625			
7 7/8"	4 1/2 I-80	11.6#		8,548		1575			

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	6,755							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) MESAVERDE	6,853	8,440		
(B) WSMVD				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
6,853 8,440	0.36	241	Open ☑ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
6853'-8440'	PMP 7067 BBLS SLICK H2O & 245,072# 30/50 SD

29. ENCLOSED ATTACHMENTS:

☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☑ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER:

30. WELL STATUS: PROD

RECEIVED
JUN 18 2008
DIV. OF OIL, GAS & MINING

(5/2000) (CONTINUED ON BACK)

31. INITIAL PRODUCTION — **INTERVAL A (As shown in item #26)**

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
5/17/2008	5/21/2008	0		0	1,051	456	FLOWING

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:
20/64	975	1,400					0	1,051	456	PROD

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

SOLD

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
WASATCH	4,116	6,452			
MESAVERDE	6,452				

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE SENIOR LAND ADMIN SPECIALIST

SIGNATURE  DATE 6/16/2008

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

Weatherford

Drilling Services

Completion

Anadarko KerrMcGee

ANADARKO - KERR McGEE

NBU#1022-1302S

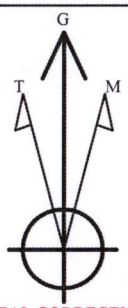
UINTAH COUNTY, UTAH

WELL FILE: 4013668C

DATE: FEBRUARY 27, 2008

Weatherford International, Ltd.
15710 John F. Kennedy Blvd
Houston, Texas 77032 USA
+1.281.260.1300 Main
+1.281.260.4730 Fax
www.weatherford.com

KERR MCGEE OIL & GAS
NBU #1022-1302S
UINTAH COUNTY, UTAH



Azimuths to Grid North
True North: -1.03°
Magnetic North: 10.45°

Magnetic Field
Strength: 52691nT
Dip Angle: 65.94°
Date: 1/15/2008
Model: bggm2007

TOTAL CORRECTION TO GRID NORTH: 10.45°

CASING DETAILS

No.	TVD	MD	Name	Size
1	2125.57	2127.00	9 5/8"	9.62

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
13O2S	0.00	0.00	14510596.50	2091378.20	39°56'47.075N	109°23'27.791W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	8150.00	-529.29	1527.44	14510067.21	2092905.64	Circle (Radius: 100)

FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	3979.00	4096.52	WASATCH
2	6205.00	6555.78	MESAVERDE

FIELD DETAILS

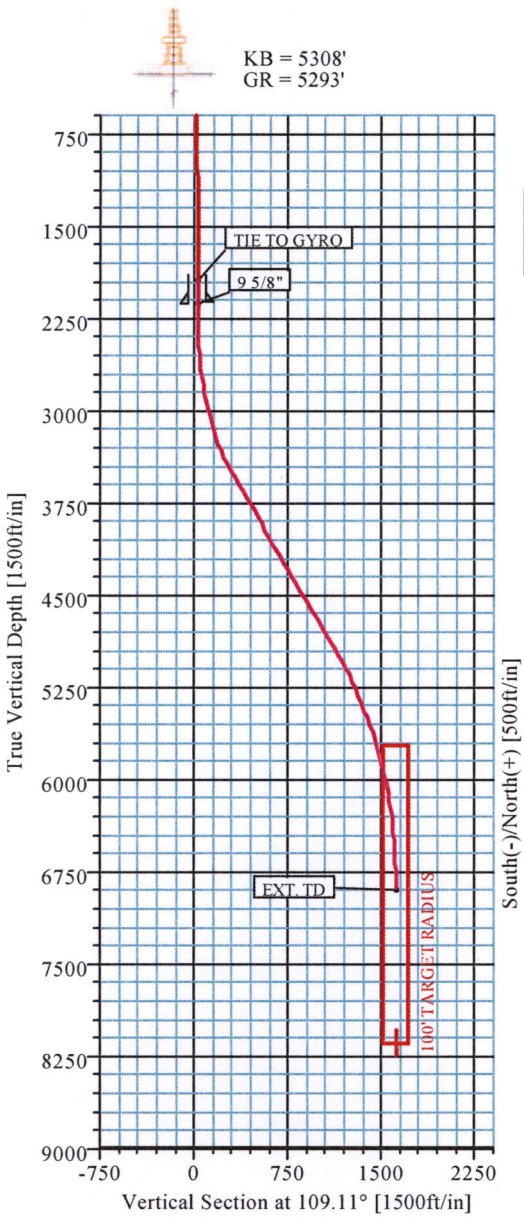
UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Geodetic System: Universal Transverse Mercator (USfeet)
Ellipsoid: NAD27 (Clarke 1866)
Zone: UTM Zone 12, North 114W to 108W
Magnetic Model: bggm2007

System Datum: Mean Sea Level
Local North: Grid North

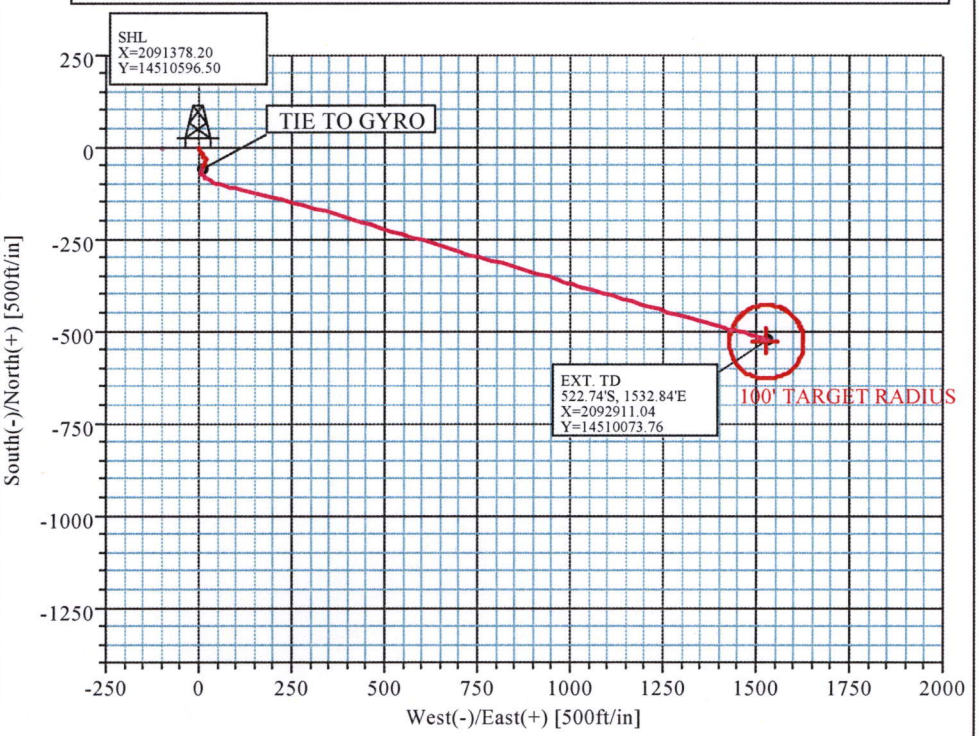
LEGEND

13O2S,1,GYRO SVY
WFT SVY



Survey: WFT SVY (13O2S/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
					EXT. TD				
83	7240.00	1.64	52.34	6886.87	-522.74	1532.84	0.00	0.00	1619.50



Survey: WFT SVY (13O2S/1)

Created By: Russell Joyner Date: 2/27/2008

Anadarko Kerr-McGee

Weatherford
SURVEY REPORT - GEOGRAPHIC

Weatherford

Company:	Anadarko-Kerr-McGee	**Date:** 2/27/2008	**Time:** 14:13:08	**Page:**	1
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	**Co-ordinate(NE) Reference:**	Site: NBU 1022-13O2S, Grid North		
Site:	NBU 1022-13O2S	**Vertical (TVD) Reference:**	SITE 5308.0		
Well:	13O2S	**Section (VS) Reference:**	Well (0.00N,0.00E,109.11Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey:	WFT SVY	**Start Date:**	2/19/2008
Company:	WEATHERFORD DRILLING SERVICES	**Engineer:**	Russell Joyner
Tool:	MWD;MWD - Standard	**Tied-to:**	From: GYRO SVY

Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)		
Map System:	Universal Transverse Mercator (USfeet)	**Map Zone:**	UTM Zone 12, North 114W to 108W
Geo Datum:	NAD27 (Clarke 1866)	**Coordinate System:**	Site Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	bggm2007

Site:	NBU 1022-13O2S				
Site Position:		**Northing:**	14510596.50 ft	**Latitude:**	39 56 47.075 N
From:	Map	**Easting:**	2091378.20 ft	**Longitude:**	109 23 27.791 W
Position Uncertainty:	0.00 ft			**North Reference:**	Grid
Ground Level:	5293.00 ft			**Grid Convergence:**	1.03 deg

Well:	13O2S				**Slot Name:**	
Well Position:	+N/-S	0.00 ft	**Northing:**	14510596.50 ft	**Latitude:**	39 56 47.075 N
	+E/-W	0.00 ft	**Easting :**	2091378.20 ft	**Longitude:**	109 23 27.791 W
Position Uncertainty:		0.00 ft				

Wellpath:	1			**Drilled From:**	Surface
				Tie-on Depth:	0.00 ft
Current Datum:	SITE	**Height**	5308.00 ft	**Above System Datum:**	Mean Sea Level
Magnetic Data:	1/15/2008			**Declination:**	11.48 deg
Field Strength:	52691 nT			**Mag Dip Angle:**	65.94 deg

Vertical Section:	**Depth From (TVD)**	**+N/-S**	**+E/-W**	**Direction**
	ft	ft	ft	deg
	0.00	0.00	0.00	109.11

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comme
1946.00	3.25	192.60	1944.76	-57.71	8.96	0.00	27.36	14510538.79	2091387.16	TIE TO GYRO
2127.00	2.00	187.75	2125.57	-65.84	7.41	0.70	28.56	14510530.66	2091385.61	9 5/8"
2172.00	1.69	185.44	2170.55	-67.28	7.24	0.70	28.87	14510529.22	2091385.44	
2234.00	1.71	190.82	2232.52	-69.10	6.98	0.26	29.22	14510527.40	2091385.18	
2295.00	1.60	184.22	2293.49	-70.84	6.75	0.36	29.57	14510525.66	2091384.95	
2357.00	1.83	145.51	2355.47	-72.52	7.25	1.87	30.59	14510523.98	2091385.45	
2419.00	3.31	138.82	2417.40	-74.68	8.99	2.43	32.94	14510521.82	2091387.19	
2480.00	3.06	138.07	2478.31	-77.22	11.23	0.42	35.90	14510519.28	2091389.43	
2542.00	3.88	132.69	2540.20	-79.87	13.88	1.42	39.27	14510516.63	2091392.08	
2604.00	5.44	131.07	2601.99	-83.22	17.64	2.52	43.92	14510513.28	2091395.84	
2666.00	6.94	123.07	2663.63	-87.20	22.99	2.79	50.28	14510509.30	2091401.19	
2728.00	8.13	120.57	2725.09	-91.47	29.91	1.99	58.21	14510505.03	2091408.11	
2790.00	9.00	115.07	2786.40	-95.76	38.08	1.93	67.33	14510500.74	2091416.28	
2852.00	9.94	108.94	2847.56	-99.55	47.53	2.22	77.50	14510496.95	2091425.73	
2912.00	11.31	105.94	2906.53	-102.85	58.09	2.46	88.56	14510493.65	2091436.29	
2974.00	12.69	104.57	2967.17	-106.23	70.52	2.27	101.42	14510490.27	2091448.72	
3035.00	14.00	103.44	3026.52	-109.63	84.18	2.19	115.44	14510486.87	2091462.38	
3098.00	15.06	102.94	3087.51	-113.23	99.57	1.69	131.16	14510483.27	2091477.77	
3160.00	16.50	99.32	3147.17	-116.46	116.11	2.81	147.85	14510480.04	2091494.31	
3220.00	18.63	102.32	3204.37	-119.89	133.89	3.86	165.76	14510476.61	2091512.09	
3283.00	20.38	106.69	3263.76	-125.19	154.23	3.61	186.72	14510471.31	2091532.43	
3345.00	22.81	103.94	3321.40	-131.18	176.24	4.24	209.48	14510465.32	2091554.44	
3406.00	25.00	104.32	3377.16	-137.22	200.21	3.60	234.10	14510459.28	2091578.41	
3467.00	26.25	107.19	3432.17	-144.40	225.58	2.89	260.43	14510452.10	2091603.78	

Weatherford
SURVEY REPORT - GEOGRAPHIC

Company:	Anadarko-Kerr-McGee	**Date:** 2/27/2008	**Time:** 14:13:08	**Page:**	2
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	**Co-ordinate(NE) Reference:**	Site: NBU 1022-13O2S, Grid North		
Site:	NBU 1022-13O2S	**Vertical (TVD) Reference:**	SITE 5308.0		
Well:	13O2S	**Section (VS) Reference:**	Well (0.00N,0.00E,109.11Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comme
3529.00	29.06	105.82	3487.08	-152.56	253.18	4.65	289.17	14510443.94	2091631.38	
3590.00	30.44	104.19	3540.04	-160.38	282.41	2.62	319.36	14510436.12	2091660.61	
3651.00	31.00	104.32	3592.48	-168.06	312.61	0.92	350.41	14510428.44	2091690.81	
3713.00	30.56	104.57	3645.74	-175.97	343.34	0.74	382.03	14510420.53	2091721.54	
3775.00	31.81	106.57	3698.79	-184.60	374.26	2.62	414.07	14510411.90	2091752.46	
3838.00	31.33	107.19	3752.46	-194.17	405.82	0.92	447.03	14510402.33	2091784.02	
3899.00	29.63	106.94	3805.03	-203.25	435.40	2.79	477.95	14510393.25	2091813.60	
3960.00	28.25	107.44	3858.41	-211.97	463.60	2.30	507.45	14510384.53	2091841.80	
4021.00	27.94	107.44	3912.22	-220.58	491.00	0.51	536.16	14510375.92	2091869.20	
4083.00	27.75	106.32	3967.05	-228.99	518.71	0.90	565.10	14510367.51	2091896.91	
4145.00	28.31	105.94	4021.77	-237.09	546.70	0.95	594.19	14510359.41	2091924.90	
4206.00	29.81	106.57	4075.09	-245.38	575.14	2.51	623.78	14510351.12	2091953.34	
4268.00	31.00	107.32	4128.56	-254.53	605.16	2.01	655.14	14510341.97	2091983.36	
4330.00	31.25	107.07	4181.64	-264.01	635.77	0.45	687.17	14510332.49	2092013.97	
4392.00	30.75	107.07	4234.78	-273.38	666.30	0.81	719.08	14510323.12	2092044.50	
4454.00	30.13	107.32	4288.24	-282.66	696.31	1.02	750.48	14510313.84	2092074.51	
4516.00	30.56	106.07	4341.74	-291.66	726.31	1.23	781.77	14510304.84	2092104.51	
4578.00	30.69	105.32	4395.10	-300.20	756.71	0.65	813.30	14510296.30	2092134.91	
4640.00	30.25	104.69	4448.53	-308.34	787.08	0.88	844.65	14510288.16	2092165.28	
4701.00	30.69	104.69	4501.11	-316.19	817.00	0.72	875.49	14510280.31	2092195.20	
4763.00	32.19	106.94	4554.01	-325.01	848.11	3.07	907.77	14510271.49	2092226.31	
4825.00	31.79	107.32	4606.59	-334.69	879.50	0.72	940.60	14510261.81	2092257.70	
4887.00	30.88	107.07	4659.55	-344.22	910.30	1.48	972.82	14510252.28	2092288.50	
4949.00	30.19	106.82	4712.95	-353.40	940.43	1.13	1004.30	14510243.10	2092318.63	
5010.00	30.19	106.69	4765.68	-362.24	969.80	0.11	1034.95	14510234.26	2092348.00	
5133.00	29.75	106.32	4872.23	-379.70	1028.71	0.39	1096.33	14510216.80	2092406.91	
5195.00	29.06	106.44	4926.24	-388.29	1057.92	1.12	1126.74	14510208.21	2092436.12	
5257.00	28.75	106.57	4980.52	-396.80	1086.65	0.51	1156.67	14510199.70	2092464.85	
5318.00	27.94	105.94	5034.20	-404.91	1114.45	1.42	1185.60	14510191.59	2092492.65	
5380.00	26.38	105.94	5089.36	-412.68	1141.67	2.52	1213.86	14510183.82	2092519.87	
5442.00	25.00	106.19	5145.23	-420.12	1167.49	2.23	1240.69	14510176.38	2092545.69	
5504.00	24.19	106.19	5201.61	-427.31	1192.27	1.31	1266.47	14510169.19	2092570.47	
5565.00	23.75	106.19	5257.35	-434.22	1216.07	0.72	1291.22	14510162.28	2092594.27	
5627.00	22.69	106.19	5314.33	-441.04	1239.55	1.71	1315.63	14510155.46	2092617.75	
5691.00	21.94	105.94	5373.53	-447.76	1262.90	1.18	1339.89	14510148.74	2092641.10	
5755.00	20.94	105.94	5433.10	-454.19	1285.39	1.56	1363.25	14510142.31	2092663.59	
5819.00	20.19	106.32	5493.02	-460.43	1306.99	1.19	1385.70	14510136.07	2092685.19	
5883.00	19.13	106.07	5553.29	-466.44	1327.67	1.66	1407.21	14510130.06	2092705.87	
5944.00	17.94	106.07	5611.13	-471.80	1346.30	1.95	1426.57	14510124.70	2092724.50	
6008.00	17.13	106.32	5672.15	-477.18	1364.82	1.27	1445.83	14510119.32	2092743.02	
6072.00	16.75	106.19	5733.38	-482.40	1382.72	0.60	1464.45	14510114.10	2092760.92	
6135.00	14.94	105.32	5793.98	-487.08	1399.27	2.90	1481.62	14510109.42	2092777.47	
6199.00	13.88	104.82	5855.96	-491.22	1414.65	1.67	1497.51	14510105.28	2092792.85	
6263.00	13.50	104.69	5918.15	-495.08	1429.30	0.60	1512.61	14510101.42	2092807.50	
6327.00	12.81	104.44	5980.47	-498.74	1443.39	1.08	1527.13	14510097.76	2092821.59	
6390.00	11.50	101.32	6042.05	-501.72	1456.32	2.33	1540.31	14510094.78	2092834.52	
6454.00	10.69	104.44	6104.86	-504.45	1468.32	1.57	1552.55	14510092.05	2092846.52	
6518.00	10.25	105.07	6167.79	-507.41	1479.57	0.71	1564.15	14510089.09	2092857.77	
6582.00	9.31	107.44	6230.86	-510.44	1490.00	1.60	1575.00	14510086.06	2092868.20	
6646.00	6.94	106.94	6294.21	-513.12	1498.64	3.70	1584.04	14510083.38	2092876.84	
6709.00	5.38	111.19	6356.85	-515.30	1505.04	2.58	1590.80	14510081.20	2092883.24	
6773.00	4.44	117.82	6420.61	-517.54	1510.03	1.71	1596.25	14510078.96	2092888.23	

Weatherford
SURVEY REPORT - GEOGRAPHIC

Company:	Anadarko-Kerr-McGee	**Date:** 2/27/2008	**Time:** 14:13:08	**Page:**	3
Field:	UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	**Co-ordinate(NE) Reference:**	Site: NBU 1022-13O2S, Grid North		
Site:	NBU 1022-13O2S	**Vertical (TVD) Reference:**	SITE 5308.0		
Well:	13O2S	**Section (VS) Reference:**	Well (0.00N,0.00E,109.11Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comme
6837.00	4.04	116.82	6484.44	-519.71	1514.23	0.64	1600.93	14510076.79	2092892.43	
6901.00	3.88	117.44	6548.29	-521.73	1518.16	0.26	1605.30	14510074.77	2092896.36	
6964.00	3.63	115.94	6611.15	-523.58	1521.85	0.43	1609.39	14510072.92	2092900.05	
7028.00	3.25	100.94	6675.04	-524.81	1525.45	1.52	1613.20	14510071.69	2092903.65	
7092.00	2.69	82.07	6738.95	-524.95	1528.72	1.75	1616.34	14510071.55	2092906.92	
7156.00	1.63	53.19	6802.91	-524.20	1530.94	2.32	1618.18	14510072.30	2092909.14	
7188.00	1.64	52.34	6834.89	-523.65	1531.66	0.08	1618.69	14510072.85	2092909.86	
7240.00	1.64	52.34	6886.87	-522.74	1532.84	0.00	1619.50	14510073.76	2092911.04	EXT. TD

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
	0.00	GREEN RIVER		0.00	0.00
4096.52	3979.00	WASATCH		0.00	0.00
6555.78	6205.00	MESAVERDE		0.00	0.00

API Well No: 43047394790000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: STUO-08512-ST

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-13O2S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047394790000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1743 FSL 1725 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 13 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
✓ SUBSEQUENT REPORT Date of Work Completion: 11/7/2009	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THIS WELL RETURNED TO PRODUCTION ON 11/07/2009.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
December 03, 2009

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 12/3/2009

RECEIVED December 03, 2009

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: STUO-08512-ST

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-13O2S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047394790000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6515 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1743 FSL 1725 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 13 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 9/28/2011	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	✓ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The operator requests authorization to recomplete the subject well. The operator requests approval to recomplete the Wasatch formation and commingle the Wasatch formation with the exisiting Mesaverde formation. Please see the attached procedure. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: 09/29/2011

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 9/27/2011

RECEIVED Sep. 27, 2011

Greater Natural Buttes Unit

NBU 1022-13O2S

RE-COMPLETIONS PROCEDURE

DATE:9/19/2011
AFE#:2064451
API#:4304739479
USER ID:rachappe (Frac Invoices Only)

COMPLETIONS ENGINEER: **RACHAEL HILL, Denver, CO**
(720)-929-6599 (Office)
(303)-907-9167 (Cell)

SIGNATURE:

ENGINEERING MANAGER: **JEFF DUFRESNE**

SIGNATURE:

RECEIVED Sep. 27, 2011

R E M E M B E R S A F E T Y F I R S T !

Name: **NBU 1022-13O2S**
Location: **NESW SEC 13 T10S R22E**
LAT: 39.946433 **LONG: -109.391442** **COORDINATE: NAD83**
Uintah County, UT
Date: **9/19/2011**

ELEVATIONS: 5293' GL 5310' KB *Frac Registry TVD: 8194*

TOTAL DEPTH: 8548' **PBTD:** 8502'
SURFACE CASING: 9 5/8", 36# J-55 LT&C @ 2144'
PRODUCTION CASING: 4 1/2", 11.6#, I-80 LT&C @ 8547'
Marker Joint **4232-4258**'

TUBULAR PROPERTIES:

	BURST (psi)	COLLAPSE (psi)	DRIFT DIA. (in.)	CAPACITIES (bbl/ft)	(gal/ft)
2 3/8" 4.7# J-55 tbg	7,700	8,100	1.901"	0.00387	0.1624
4 ½" 11.6# I-80 (See above)	7780	6350	3.875"	0.0155	0.6528
2 3/8" by 4 ½" Annulus				0.0101	0.4227

TOPS: **BOTTOMS:**

1045' Green River Top
1297' Bird's Nest Top
1674' Mahogany Top
4116' Wasatch Top 6452' Wasatch Bottom
6452' Mesaverde Top 8548' Mesaverde Bottom (TD)

T.O.C. @ 1700'

GENERAL:

- A minimum of **5** tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Bakers Induction-Density-Neutron log dated 2/23/2008
- **3** fracturing stages required for coverage.
- Procedure calls for **4** CBP's (**8000** psi) .
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- Pump scale inhibitor at 3 gpt (in pad and until 1.25 ppg ramp up is reached) and 10 gpt in all flushes except the final stage. Remember to pre-load the casing with scale inhibitor for the very first stage with 10 gpt.
- 30/50 mesh Ottawa sand, **Slickwater frac**.
- Maximum surface pressure **6200** psi.

RECEIVED Sep. 27, 2011

- Flush volumes are the sum of slick water and acid used during displacement (include scale inhibitor as mentioned above). Stage acid and scale inhibitor if necessary to cover the next perforated interval.
- **Call flush at 0 PPG @ inline densiometers. Slow to 5 bbl/min over last 10-20 bbls of flush. Flush to top perf.**
- **If distance between plug and top perf of previous stage is less than 50', it is considered to be tight spacing - over flush stage by 5 bbls (from top perf)**
- Tubing Currently Landed @~6703
- Originally completed on 5/9/2008

Existing Perforations:

Zones	Perforations		SPF	Holes
	Top, ft	Bottom, ft		
MESAVERDE	8321	8323	4	8
MESAVERDE	8392	8394	4	8
MESAVERDE	8430	8432	4	8
MESAVERDE	8436	8440	4	16
MESAVERDE	7955	7958	3	9
MESAVERDE	7984	7988	4	16
MESAVERDE	8108	8113	4	20
MESAVERDE	7738	7740	4	8
MESAVERDE	7745	7748	4	12
MESAVERDE	7824	7829	4	20
MESAVERDE	7240	7242	3	6
MESAVERDE	7300	7302	3	6
MESAVERDE	7388	7396	4	32
MESAVERDE	6964	6966	3	6
MESAVERDE	7062	7064	3	6
MESAVERDE	7142	7150	3	24
MESAVERDE	6853	6862	4	36

Relevant History:
Well scales up and has had SlickLine approximately every 5 months. Most recent SlickLine shows nipple depth to be @~6784 and fluid level @~4600. Viper Plunger.
*Slickline stacked out at 5 feet on 3/3/2011.

RECEIVED Sep. 27, 2011

H2S History:

NBU 1022-13O2S

Date	H2S H2S_SEPARATOR_PPM
11/1/2008	26.00
12/1/2008	14.00
1/1/2009	40.00
2/1/2009	20.00
3/1/2009	60.00
4/1/2009	57.00
5/1/2009	40.00
6/1/2009	25.00
7/1/2009	55.00
8/1/2009	65.00
9/1/2009	18.00
10/1/2009	
11/1/2009	98.00
12/1/2009	60.00
1/1/2010	50.00
2/1/2010	132.00
3/1/2010	112.00
4/1/2010	125.00

PROCEDURE: (If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work.)

1. MIRU. Control well with recycled water and biocide as required. ND WH, NU BOP's and test.

2. TOOH with 2-3/8", 4.7#, J-55 (or N-80) tubing (currently landed at ~6703'). Visually inspect for scale and consider replacing if needed.

3. If tbg looks ok consider running a gauge ring to 6361 (50' below proposed CBP). Otherwise P/U a mill and C/O to 6361 (50' below proposed CBP).

4. Set 8000 psi CBP at ~ 6311'. ND BOPs and NU frac valves. Test frac valves and casing to 1000 and 3500 psi for 15 minutes each and to 6200 psi for 30 minutes. As per standard operating procedure install steel blowdown line to reserve pit from 4-1/2" X 9-5/8" annulus with pressure relief valve in line. Lock **OPEN** the Braden head valve. Annulus will be monitored throughout stimulation. If release occurs, stimulation will be shut down. Well conditions will be assessed and actions taken as necessary to secure the well. UDOGM will be notified if a release to the annulus occurs.

RECEIVED Sep. 27, 2011

5. Perf the following with 3-3/8" gun, 23 gm, 0.36"hole:

Zone	From	To	spf	# of shots
WASATCH	6275	6281	4	24

6. Breakdown perfs and establish injection rate (include scale inhibitor in fluid). Spot 250 gals of 15% HCL and let soak 5-10 min. Fracture as outlined in Stage 1 on attached listing. Under-displace to ~6275' and trickle 250gal 15%HCL w/ scale inhibitor in flush .

7. Set 8000 psi CBP at ~6047'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

Zone	From	To	spf	# of shots
WASATCH	5958	5961	4	12
WASATCH	6014	6017	4	12

8. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~5958' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

9. Set 8000 psi CBP at ~5558'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
WASATCH	5500	5503	4	12
WASATCH	5525	5528	4	12

10. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~5500' flush only with recycled water.

11. Set 8000 psi CBP at~5450'.

12. TIH with 3 7/8" mill, sliding sleeve, pump off sub, SN and tubing.

13. Mill 3 plugs and clean out to a depth of 6311. THE WELL WILL BE COMMINGLED AT THIS TIME.

14. Land tubing at 5470', drop ball and pump open sub. Flow back completion load. RDMO.

15. MIRU, POOH tbg and mill. TIH with POBS and mill.

16. Mill last plug @ 6311' clean out to PBTD @ 8502. Land tubing at ±**6703'**. Pump off bit and bit sub. This well WILL be commingled at this time.

17. Clean out well with foam and/or swabbing unit until steady flow has been established from re-complete.

18. **Leave surface casing valve open**. Monitor and report any flow from surface casing. RDMO

RECEIVED Sep. 27, 2011

For design questions, please call
Rachael Hill, Denver, CO
(720)-929-6599 (Office)
(303)-907-9167 (Cell)

For field implementation questions, please call
Jeff Samuels, Vernal, UT
435-781 7046 (Office)

NOTES:
If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work

Verify that the Braden head valve is locked OPEN.

Acid Pickling and H2S Procedures (If Required)

**PROCEDURE FOR PUMPING ACID DOWN TBG

WHEN FINDING SCALE IN TUBING THAT IS ACID SOLUBLE, ENSURE THAT PLUNGER EQUIPMENT IS REMOVED AND ABLE TO PUMP DOWN TBG. INSTALL A 'T' IN PUMP LINE W/2" VALVE THAT NALCO CAN TIE INTO. HAVE 60 BBLS 2% KCL MIXED W/ 10-15 GAL H2S SCAVENGER IN RIG FLAT TANK. (WE USED THE RIG FLAT TANK FOR MIXING CHEMICAL SO WE DIDN'T HAVE THE CHEMICAL IN ALL FLUIDS ON LOCATION, ONLY WHAT WE NEEDED TO PUMP DOWN HOLE)

1. PUMP 5-10 BBLS 2% KCL DOWN TBG (NALCO CANNOT PUMP AGAINST PRESSURE)
2. NALCO WILL PUMP 3 DRUMS HCL (31%) INTO PUMP LINE.
3. FLUSH BEHIND ACID WITH 10-15 BBL 2% KCL
4. PUMP 2—30 BBL 2% W/ H2S SCAVENGER DOWN TBG.
5. PUMP REMAINDER OF 2% W/ H2S SCAVENGER DOWN CASING AND SHUT WELL IN FOR MINIMUM OF 2 HRS.
6. OVER DISPLACE DOWN TBG AND CSG TO FLUSH ACID AND SCAVENGER INTO FORMATION
7. MONITOR TUBING FOR FLOW AND CASING FOR H2S NOW AS POOH W/ TUBING.

** PROCEDURE FOR PUMPING H2S SCAVENGER WITHOUT ACID

PRIOR TO RIG MOVING ON OR AS RIG PULLS ONTO LOCATION. TEST CASING, TUBING AND SEPARATOR FOR H2S. IF FOUND MAKE SURE THAT PLUNGER SYSTEM IS REMOVED (IT IS POSSIBLE TO PUMP AROUND PLUNGERS BUT SOME WILL HAVE A STANDING VALVE IN SEATING NIPPLE).

1. MIX 10-15 GAL H2S SCAVENGER WITH 60-100 BBL 2% KCL IN RIG FLAT TANK.
2. PUMP 25 BBLS MIXTURE DOWN TUBING AND REST DOWN CASING. SHUT WELL IN FOR 2 HOURS.
3. IF WELL HAS PRESSURE AFTER 2 HOURS – RETEST CASING AND TUBING FOR H2S.
4. FLUSH TUBING AND CASING PUSHING H2S SCAVENGER INTO FORMATION.
5. MONITOR TUBING FOR FLOW AND CASING FOR H2S NOW AS POOH W/ TUBING.

RECEIVED Sep. 27, 2011

** As per APC standard operating procedure, APC foreman will verify ALL volumes pumped and record on APC Volume Report Form

Key Contact information

Completion Engineer

Rachael Hill: 303-907-9167, 720-929-6599

Production Engineer

Ben Smiley: 936-524-4231, 435-781-7010

Completion Supervisor Foreman

Jeff Samuels: 435-828-6515, 435-781-7046

Completion Manager

Jeff Dufresne: 720-929-6281, 303-241-8428

Vernal Main Office

435-789-3342

Emergency Contact Information—Call 911

Vernal Regional Hospital Emergency: 435-789-3342

Police: (435) 789-5835

Fire: 435-789-4222

Total Stages	3	stages
Last Stage Flush	3590	gals

Service Company Supplied Chemicals - Job Totals

Friction Reducer	38	gals @	0.5	GPT
Surfactant	77	gals @	1.0	GPT
Clay Stabilizer	77	gals @	1.0	GPT
15% Hcl	750	gals @	250	gal/stg
Iron Control for acid	4	gals @	5.0	GPT of acid
Surfactant for acid	1	gals @	1.0	GPT of acid
Corrosion Inhibitor for acid	2	gals @	2.0	GPT of acid

Third Party Supplied Chemicals Job Totals - Include Pumping Charge if Applicable

Scale Inhibitor	249	gals pumped per schedule above		
Biocide	38	gals @	0.5	GPT

RECEIVED Sep. 27, 2011

Fracturing Schedules

Name NBU 1022-13O2S

Slickwater Frac

Copy to new book

Recomplete?	Y
Pad?	n
ACTS?	n

Swabbing Days	2	Enter Number of swabbing days here for recompletes
Production Log	0	Enter 1 if running a Production Log
DFIT	0	Enter Number of DFITs

Stage	Zone	Perfs Top, ft.	Perfs Bot., ft	SPF	Holes	Rate BPM	Fluid Type	Initial ppg	Final ppg	Fluid	Volume gals	Cum Vol gals	Volume BBLs	Cum Vol BBLs	Fluid % of frac	Sand % of frac	Sand lbs	Cum. Sand lbs	Footage from CBP to Flush	Scale Inhib., gal.
1	WASATCH	6275	6281	4	24	Varied	Pump-in test			Slickwater		0	0	0						
	WASATCH					0	ISIP and 5 min ISIP													39
	WASATCH					50	Slickwater Pad			Slickwater	3,916	3,916	93	93	15.0%	0.0%	0	0		12
	WASATCH					50	Slickwater Ramp	0.25	1	Slickwater	13,052	16,968	311	404	50.0%	37.3%	8,158	8,158		39
	WASATCH					50	Slickwater Ramp	1	2	Slickwater	9,136	26,104	218	622	35.0%	62.7%	13,705	21,862		0
	WASATCH					50	Flush (4-1/2)			Slickwater	4,096	30,200	98	719				21,862		0
	WASATCH						ISDP and 5 min ISDP			Slickwater										0
	WASATCH																			0
	WASATCH																	21,862		0
	WASATCH											30,200	98	719						39
	WASATCH																			129
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		26,104								
			# of Perfs/stage		24									Flush depth	6275	gal/md-ft	19,000	15,913	lbs sand/md-ft	
						14.4	<< Above pump time (min)										CBP depth	6,047	228	
2	WASATCH	5958	5961	4	12	Varied	Pump-in test			Slickwater		0	0	0						
	WASATCH	6014	6017	4	12	0	ISIP and 5 min ISIP													
	WASATCH					50	Slickwater Pad			Slickwater	3,168	3,168	75	75	15.0%	0.0%	0	0		10
	WASATCH					50	Slickwater Ramp	0.25	1	Slickwater	10,561	13,730	251	327	50.0%	37.3%	6,601	6,601		32
	WASATCH					50	Slickwater Ramp	1	2	Slickwater	7,393	21,123	176	503	35.0%	62.7%	11,089	17,690		0
	WASATCH					50	Flush (4-1/2)			Slickwater	3,889	25,012	93	596				17,690		0
	WASATCH						ISDP and 5 min ISDP			Slickwater										0
	WASATCH																			0
	WASATCH																	17,690		0
	WASATCH											25,012	93	596						36
	WASATCH																			77
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		21,123								
			# of Perfs/stage		24									Flush depth	5958	gal/md-ft	31,550	26,423	lbs sand/md-ft	
						11.9	<< Above pump time (min)										CBP depth	5,558	400	
3	WASATCH	5500	5503	4	12	Varied	Pump-in test			Slickwater		0	0	0						
	WASATCH	5525	5528	4	12	0	ISIP and 5 min ISIP													
	WASATCH					50	Slickwater Pad			Slickwater	3,214	3,214	77	77	15.0%	0.0%	0	0		10
	WASATCH					50	Slickwater Ramp	0.25	1	Slickwater	10,714	13,928	255	332	50.0%	37.3%	6,696	6,696		32
	WASATCH					50	Slickwater Ramp	1	2	Slickwater	7,500	21,428	179	510	35.0%	62.7%	11,250	17,946		0
	WASATCH					50	Flush (4-1/2)			Slickwater	3,590	25,018	85	596				17,946		0
	WASATCH						ISDP and 5 min ISDP			Slickwater										0
	WASATCH																			0
	WASATCH																	17,946		0
	WASATCH											25,018	85	596						0
	WASATCH																			42
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		21,428								
			# of Perfs/stage		24									Flush depth	5500	gal/md-ft	88,000	73,700	lbs sand/md-ft	
						0.0											CBP depth	5,450	50	
	Totals				72						**Total Fluid**	80,231	gals	1,910	bbls		**Total Sand**	57,498		
												1,910	bbls							
						0.6								4.2	tanks				Total Scale Inhib. =	249

Name NBU 1022-13O2S
Perforation and CBP Summary

Stage	Zones	Perforations		SPF	Holes		Fracture Coverage		
		Top, ft	Bottom, ft						
1	WASATCH	6275	6281	4	24		6257.5	to	6284
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	# of Perfs/stage				24		CBP DEPTH	6,047	
2	WASATCH	5958	5961	4	12		5953	to	5964
	WASATCH	6014	6017	4	12		6006.5	to	6020
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	# of Perfs/stage				24		CBP DEPTH	5,558	
3	WASATCH	5500	5503	4	12		5487	to	5507
	WASATCH	5525	5528	4	12		5522.5	to	5529.5
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	WASATCH								
	# of Perfs/stage				24		CBP DEPTH	5,450	
	Totals				72				

RECEIVED Sep. 27, 2011

MD	TVD	INC		MD	TVD	INC
0	0	0		4083	3967.045	27.75
100	99.99	1.25		4145	4021.773	28.31
200	199.97	1.25		4206	4075.092	29.81
300	299.94	1.25		4268	4128.564	31
400	399.92	1.5		4330	4181.639	31.25
500	499.88	1.75		4392	4234.783	30.75
600	599.82	2		4454	4288.237	30.13
700	699.76	2		4516	4341.743	30.56
800	799.69	2.25		4578	4395.096	30.69
900	899.62	2.25		4640	4448.533	30.25
1000	999.55	2		4701	4501.109	30.69
1100	1099.49	2		4763	4554.007	32.19
1200	1199.43	1.75		4825	4606.591	31.79
1300	1299.4	1		4887	4659.548	30.88
1400	1399.37	2.25		4949	4712.949	30.19
1500	1499.27	2.75		5010	4765.675	30.19
1600	1599.16	2.75		5072	4819.301	30.06
1700	1699.04	2.75		5133	4872.179	29.75
1800	1798.93	2.75		5195	4926.191	29.06
1900	1898.82	2.5		5257	4980.468	28.75
1946	1944.76	3.25		5318	5034.154	27.94
2172	2170.547	1.69		5380	5089.316	26.38
2234	2232.52	1.71		5442	5145.186	25
2295	2293.495	1.6		5504	5201.56	24.19
2357	2355.469	1.83		5565	5257.299	23.75
2419	2417.405	3.31		5627	5314.276	22.69
2480	2478.311	3.06		5691	5373.483	21.94
2542	2540.197	3.88		5755	5433.053	20.94
2604	2601.99	5.44		5819	5492.975	20.19
2666	2663.628	6.94		5883	5553.243	19.13
2728	2725.091	8.13		5944	5611.078	17.94
2790	2786.4	9		6008	5672.103	17.13
2852	2847.556	9.94		6072	5733.326	16.75
2912	2906.527	11.31		6135	5793.93	14.94
2974	2967.17	12.69		6199	5855.916	13.88
3035	3026.522	14		6263	5918.097	13.5
3098	3087.506	15.06		6327	5980.418	12.81
3160	3147.17	16.5		6390	6042.005	11.5
3220	3204.37	18.63		6454	6104.808	10.69
3283	3263.756	20.38		6518	6167.743	10.25
3345	3321.401	22.81		6582	6230.812	9.31
3406	3377.165	25		6646	6294.165	6.94
3467	3432.166	26.25		6709	6356.8	5.38
3529	3487.078	29.06		6773	6420.565	4.44
3590	3540.038	30.44		6837	6484.39	4.04
3651	3592.478	31		6901	6548.237	3.88
3713	3645.744	30.56		6964	6611.101	3.63
3775	3698.786	31.81		7028	6674.987	3.25
3838	3752.462	31.33		7092	6738.895	2.96
3899	3805.03	29.63		7156	6802.844	1.63
3960	3858.412	28.25		7188	6834.831	1.64
4021	3912.224	27.94		7240	6886.81	1.66
				8548	8194.365	1.53

RECEIVED Sep. 27, 2011

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ (highlight changes) FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: UO-08512 ST

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ DRY ☐ OTHER

7. UNIT or CA AGREEMENT NAME: UTU63047A

b. TYPE OF WORK: NEW WELL ☐ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☑ OTHER RECOMPLETION

8. WELL NAME and NUMBER: NBU 1022-13O2S

2. NAME OF OPERATOR: KERR MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 4304739479

3. ADDRESS OF OPERATOR: P.O.BOX 173779 CITY DENVER STATE CO ZIP 80217

PHONE NUMBER: (720) 929-6304

10 FIELD AND POOL, OR WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: NESW 1743 FSL 1725 FWL S13. 10S,R22E
AT TOP PRODUCING INTERVAL REPORTED BELOW: SWSE 1315 FSL 2385 FEL S13,T10S,R22E
AT TOTAL DEPTH: SWSE 1204 FSL 2014 FEL

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 13 10S 22E S

12. COUNTY: UINTAH

13. STATE: UTAH

14. DATE SPUDDED: 11/13/2007

15. DATE T.D. REACHED: 2/23/2008

16. DATE COMPLETED: 1/10/2012 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): 5292 GL

18. TOTAL DEPTH: MD 8,548 TVD 8,194

19. PLUG BACK T.D.: MD 8,504 TVD 8,150

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
CBL/CCL/GR-COMP2-CD/CN/CAL/HDL

23.
WAS WELL CORED? NO ☑ YES ☐ (Submit analysis)
WAS DST RUN? NO ☑ YES ☐ (Submit report)
DIRECTIONAL SURVEY? NO ☐ YES ☑ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20"	14" STL	36.7#	0	40		28			
12 1/4"	9 5/8" J-55	36#	0	2,170		625			
7 7/8"	4 1/2" I-80	11.6#	0	8,548		1,575			

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	6,708							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) WASATCH	5,500	6,281		
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
5,500 6,281	0.36	72	Open ☑ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
5500 - 6281	PUMP 2,018 BBLS SLICK H2O & 41.343 LBS 30/50 OTTAWA SAND
	3 STAGES

29. ENCLOSED ATTACHMENTS:

☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☐ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER:

30. WELL STATUS: PROD

RECEIVED
AUG 07 2012
DIV. OF OIL, GAS & MINING

(5/2000) **(CONTINUED ON BACK)**

31. INITIAL PRODUCTION

INTERVAL A (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
1/10/2012	4/30/2012	24		0	656	0	FLOWING

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:
24/64	131	570					0	656	0	PROD

INTERVAL B (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				GREEN RIVER	1,045
				BIRD'S NEST	1,297
				MAHOGANY	1,674
				WASATCH	4,116
				MESAVERDE	6,452

35. ADDITIONAL REMARKS (Include plugging procedure)

Attached is the recompletion history and perforation report. Test information is production from Wasatch/Mesaverde perforations. Casing in the well is as previously reported on the original Completion Report. New recompletion perforations are: Wasatch 5500-6281. Exisitng Perforations were: Mesaverde 6853-8440. ISO plug was drilled out 4/19/12 and well was fully commingled.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) CARA MAHLER TITLE REGULATORY ANALYST

SIGNATURE DATE 8/2/2012

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-13O-2S BLUE			Spud Date: 11/13/2007
Project: UTAH-UINTAH	Site: WHITE RIVER PAD		Rig Name No: MILES 3/3, MILES 3/3
Event: RECOMPL/RESEREVEADD	Start Date: 12/29/2011		End Date:
Active Datum: RKB @5,310.00usft (above Mean Sea Level)	UWI: 0/10/S/22/E/13/0/0/6/PM/S/1,737.00/W/0/1,725.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
12/29/2011	7:00 - 7:15	0.25	COMP	48		P		JSA- ND/NU. FISH HANGER.
	7:15 - 10:00	2.75	COMP	30	F	P		FTP 80, FCP 80, SURFACE CSG OPEN. BLEED OFF TBG. ND WH. FOUND PAD PLUNGER STUCK IN HANGER. THREADS BAD IN HANGER. ORDER SPEAR. NU BOP. RU FLOOR. SPOT TBG TRAILERS. WAIT ON TOOLS.
	10:00 - 10:30	0.50	COMP	31	B	X		MU SPEAR, X/O SUB, TBG SUB. SPEAR TBG. PULL HANGER. LD TOOLS AND HANGER.
	10:30 - 13:30	3.00	COMP	31	I	P		RU B&C. SCAN AND SORT AS POOH W/ - JTS 2-3/8" L-80 TBG POOH AS SCAN TBG. LD 215-JTS. HAVE 177-JTS YELLOW AND 38-JTS RED. HAD SCALE ON OD AND ID ON #177 AT 5560' TO EOT. RD B&C. MOVE TBG TRAILERS..
	13:30 - 17:30	4.00	COMP	34	I	P		RU CASEDHOLE EWL. RIH W/ 3.625" GR/JB TO 6350'. RIH AS SET 4-1/2" CIBP ISOLATION PLUG AT 6311'. RD EWL. RD FLOOR. ND BOP. NU FRAC VALVES. FILL CSG W/ 70 BBLS. PRES TEST TO 1000#. BOTH CSG VALVES LEAKING. BLEED OFF. RDSU. MOVE OVER TO 13I-31S. RUSU. SDFN
12/30/2011	9:00 - 10:30	1.50	COMP	47		X		REPLACE BOTH CSG VALVES. PRES TEST W/ RIG PMP.
1/4/2012	8:00 - 9:00	1.00	COMP	33	C	P		RU B&C. PRES TO 1093# FOR 15 MIN. END AT 1084#. LOST 9#. PRES TO 3533# FOR 15 MIN. END AT 3507#. LOST 26#. PRES TO 6240# FOR 30 MIN. END AT 6186#. LOST 54# BLEED OFF AND RD B&C.

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-13O-2S BLUE			Spud Date: 11/13/2007
Project: UTAH-UINTAH	Site: WHITE RIVER PAD		Rig Name No: MILES 3/3, MILES 3/3
Event: RECOMPL/RESEREVEADD	Start Date: 12/29/2011		End Date:
Active Datum: RKB @5,310.00usft (above Mean Sea Level)	UWI: 0/10/S/22/E/13/0/0/6/PM/S/1,737.00/W/0/1,725.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
1/5/2012	12:00 - 18:00	6.00	COMP	36	B	P		PERF STAGE 1# AS PER DES. 3 1/8 EXP GUN 23 GM .36 HOLE 90 DEG PHAZING STAGE 1#WHP 882 PSI, BRK 2029 PSI @ 5 BPM. ISIP 1300 PSI, FG .64. CALC PERFS OPEN @ 50.6 BPM @ 4200 PSI = 88% HOLES OPEN. ISIP 2450 PSI, FG .82, NPI 1150 PSI. MP 5391 PSI, MR 50.3 BPM, AP 3309 PSI, AR 45.7 BPM, PUMPED 30/50 OWATTA SAND. PERF STAGE 2# AS PER DES. 3 1/8 EXP GUN, 23 GM, .36 HOLES, 90 DEG PHASING, CBP SET @ 6047. FRAC STAGE 2#WHP 1036 PSI, BRK 1895 PSI @ 5 BPM. ISIP 1550 PSI, FG .69. CALC PERFS OPEN @ 50.7 BPM @ 3900 PSI = 91% HOLES OPEN. ISIP 2120 PSI, FG .79, NPI 570 PSI. MP 4286 PSI, MR 51 BPM, AP 3573 PSI, AR 50.9 BPM, PUMPED 30/50 OWATTA SAND. POOH. SWIFN.
1/6/2012	9:00 - 18:00	9.00	COMP	36	B	P		PERF STAGE 3# RIH W/ CBP, & PERF GUN. PERF AS PER DES. 31/8 EXP GUN, 23 GM, .36 HOLES 90 DEG PHASING. SET CBP @ 5558'. FRAC STAGE 3# WHP 270 PSI, BRK 1983 PSI @ 5.3 BPM. ISIP 1145 PSI, FG .64. CALC PERFS OPEN @ 00.0 BPM @ 0000 PSI = 00% HOLES OPEN. ISIP 1640 PSI, FG .73, NPI 495 PSI. MP 3885 PSI, MR 52.1 BPM, AP 3297 PSI, AR 52 BPM, PUMPED 30/50 OWATTA SAND. POOH. SWIFN. RIH SET CBP @ 5450'. TOTAL SAND = 41,343# TOTAL CLEAN= 2018 BBLS
1/10/2012	7:00 - 7:15	0.25	COMP	48		P		SAFETY = JSA

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-13O-2S BLUE		Spud Date: 11/13/2007	
Project: UTAH-UINTAH	Site: WHITE RIVER PAD		Rig Name No: MILES 3/3, MILES 3/3
Event: RECOMPL/RESEREVEADD	Start Date: 12/29/2011		End Date:
Active Datum: RKB @5,310.00usft (above Mean Sea Level)	UWI: 0/10/S/22/E/13/0/0/6/PM/S/1,737.00/W/0/1,725.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 18:00	10.75	COMP	30		P		SICP = 0#. RDMO 1022-13O-4S. MIRU. NDWH. NUBOP. P/U & RIH W/ 3-7/8" MILL + PUMP OPEN BIT SUB + XN + 173 JTS 2-3/8" J-55 4.7# TBNG. T/U ON KILL CBP @ 5450'. TEST BOP'S GOOD @ 3000#. BREAK CIRCULATION & BEGIN D/O AS FOLLOWS: CBP #1) DRLG OUT BAKER 8K CBP @ 5450' IN 8 MIN. 100 LBS DIFF. PSI. RIH, TAG SND @ 5528'. C/O 30' OF SND. FCP = 100 PSI. CBP #2) DRLG OUT BAKER 8K CBP @ 5558' IN 10 MIN. 100 LBS DIFF. PSI. RIH, TAG SND @ 6032 '. C/O 15' OF SND. FCP = 100 PSI. CBP #2) DRLG OUT BAKER 8K CBP @ 6047' IN 10 MIN. 200 LBS DIFF. PSI. RIH, TAG SND @ 6290'. C/O 21' OF SND. FCP = 200 PSI. WASH DOWN TO ISOLATION CBP @6311' W/ BHA + 199 JTS. 2-3/8" J-55 TBNG. CIRC BOTTOMS UP X2. L/D 27 JTS. LAND WELL ON HANGER W/ 172 JTS 2-3/8" J-55 Y-BND + MILL + PUMP OPEN SUB + XN. EOT@ 5479.40'. NDBOP. NUWH. DROP BALL & PUMP OPEN BIT SUB @ 900#. MIRU B&C + TEST SURFACE EQUIP TO THE HAL SEPERATOR @ 2000#. PRESSURE LEAKED OFF W/ NO VISIBLE SURFACE LEAKS. TBNG MASTER VALVE IS LEAKING. SPOKE W/ SUPERVISOR & WAS CLEARED TO FLOW BACK WELL. TURN WELL OVER TO FLOWBACK CREW. R/D RIG. SDFN. NOTE: WELL FLOWING W/ SICP @850# FTP@ 375# AND CLIMBING. WATER RECOV =300 BBLS. TWLTR = +/- 1720 BBLS KB = 17 172 JTS 2-3/8" J-55 TBNG. = 5458.49' XN = 1.33' PUMP OPEN SUB = 1.44' 3-7/8" MILL = .31' EOT@ 5479.40'
	20:00 -		PROD	50				WELL TURNED TO SALES @ 2000 HR ON 1/10/12 - 650 MCFD, 1920 BWPD, FCP 1100#, FTP 450#, 20/64 CK
1/12/2012	7:00 -		PROD	50				WELL IP'D ON 1/12/12 - 1839 MCFD, 0 BOPD, 0 BWPD, CP 700 #, FTP 183#, CK 24/64", LP 109#, 24 HRS

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-13O-2S BLUE		Spud Date: 11/13/2007
Project: UTAH-UINTAH	Site: WHITE RIVER PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: WELL WORK EXPENSE	Start Date: 4/2/2012	End Date: 4/19/2012
Active Datum: RKB @5,310.00usft (above Mean Sea Level)	UWI: 0/10/S/22/E/13/0/0/6/PM/S/1,737.00/W/0/1,725.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
4/18/2012	7:00 - 7:15	0.25	COMP	48		P		HSM - JSA
	7:15 - 15:00	7.75	COMP	31	I	P		MIRU, TBG 130 PSI CSG 130 PSI, CONTROL WELL W/ 35 BBLS TMAC, NDWH, NUBOP, POOH W/ TBG, CONTROL WELL W/ 30 BBLS TMAC, L/D PUMP OPEN BIT SUB, P/U 3 7/8" BIT POBS & USED XN SN, RIH W/ 86 STANDS TBG, P/U 27 JTS OFF FLOAT RIH TAG FILL @ 6296', R/U PWR SWIVEL, SWIFN
4/19/2012	7:00 - 7:15	0.25	COMP	48		P		HSM - JSA
	7:15 - 17:00	9.75	COMP	44	C	P		SICP- 700 PSI, SITP- 0 PSI, OPEN WELL, R/U WEATHERFORD FOAM UNIT BREAK CIRC, D/O CIBP IN 85 MIN, 500 PSI INCREASE FCP 650 PSI, RIH TAG BRIDGE @ 7,740' D/O 15' BREAK FREE, RIH TAG FILL @ 8,436', C/O 20' SAND HIT OLD POBS @ 8,456', DRL 30 MIN NO GAIN, PBTD @ 8,456', BTM PERF @ 8,440', CIRC WELL CLEAN, R/D FOAM UNIT & PWR SWIVEL, POOH L/D 56 JTS ON FLOAT, LAND W/ 211 JTS 2 3/8" J-55 TBG, EOT @ 6707.53', R/D FLOOR & TBG EQUIP, NDBOP, NUWH, DROP BALL POBS @ 2,300 PSI, LET BIT FALL 20 MIN, CSG 650 PSI TBG 0 PSI, SHUT IN TO BUILD PRESS, TURN OVER TO PROD, RDMO, SDFN. KB - 17' 4 1/16" HANGER - .83 211 JTS 2 3/8" J-55 - 6687.50' POBS - 2.20' EOT @ 6707.53' TWTR = 285 BBLS TWR = 260 BBLS TWLTR = 25 BBLS

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 1022-13O-2S BLUE	**Wellbore No.**	OH
Well Name	NBU 1022-13O-2S	**Wellbore Name**	NBU 1022-13O-2S
Report No.	1	**Report Date**	1/4/2012
Project	UTAH-UINTAH	**Site**	WHITE RIVER PAD
Rig Name/No.		**Event**	RECOMPL/RESEREVEADD
Start Date	12/29/2011	**End Date**	
Spud Date	11/13/2007	**Active Datum**	RKB @5,310.00usft (above Mean Sea Level)
UWI	0/10/S/22/E/13/0/0/6/PM/S/1,737.00/W/0/1,725.00/0/0		

1.3 General

Contractor	CASED HOLE SOLUTIONS	**Job Method**	PERFORATE	**Supervisor**	FRANK WINN
Perforated Assembly	PRODUCTION CASING	**Conveyed Method**	WIRELINE		

1.4 Initial Conditions

Fluid Type	KCL WATER	**Fluid Density**	
Surface Press		**Estimate Res Press**	
TVD Fluid Top		**Fluid Head**	
Hydrostatic Press		**Press Difference**	
Balance Cond	NEUTRAL		

1.5 Summary

Gross Interval	5,500.0 (usft)-6,281.0 (usft	**Start Date/Time**	1/4/2012 12:00AM
No. of Intervals	5	**End Date/Time**	1/4/2012 12:00AM
Total Shots	72	**Net Perforation Interval**	18.00 (usft)
Avg Shot Density	4.00 (shot/ft)	**Final Surface Pressure**	
		Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
1/4/2012 12:00AM	WASATCH/			5,500.0	5,503.0	4.00		0.360	EXPENDIBLE/	3.125	90.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
1/4/2012 12:00AM				5,525.0	5,528.0	4.00		0.360	EXPENDIBLE/	3.125	90.00		23.00	PRODUCTION	
1/4/2012 12:00AM	WASATCH/			5,958.0	5,961.0	4.00		0.360	EXPENDIBLE/	3.125	90.00		23.00	PRODUCTION	
1/4/2012 12:00AM	WASATCH/			6,014.0	6,017.0	4.00		0.360	EXPENDIBLE/	3.125	90.00		23.00	PRODUCTION	
1/4/2012 12:00AM	WASATCH/			6,275.0	6,281.0	4.00		0.360	EXPENDIBLE/	3.125	90.00		23.00	PRODUCTION	

3 Plots

3.1 Wellbore Schematic